



Sequence Listing.txt  
SEQUENCE LISTING

<110> Japan Science and Technology Corporation

<120> Antibodies presented protein hollow nano-particles for therapeutic drug and protein hollow nano-particles

<130> P023P03

<140> PCT/JP2003/003694

<141> 2003-03-26

<150> JP 2002-097424

<151> 2002-03-29

<150> JP 2003-045088

<151> 2003-02-21

<160> 244

<170> PatentIn Ver. 2.1

<210> 1

<211> 39

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 1

cgacaaggca tgggaggcgg ccgcagccct caggctcag 39

<210> 2

<211> 39

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 2

ctgagcctga gggctgcggc cgcctcccat gccttgctg 39

<210> 3

<211> 36

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 3

ggggacctcg gatccgcgag cttaccagtt ctcaca 36

<210> 4

<211> 36

Sequence Listing.txt

<212> DNA  
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 <400> 4  
 gaggtcgacc agctttaacg aacgcagaat tttcga 36

<210> 5  
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 <212> DNA  
 <213> Artificial Sequence  
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 <400> 5  
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<210> 6  
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<210> 7  
 <211> 29  
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<210> 8  
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 ggccgcggtt aaatgtatac ccaaagac 28

Sequence Listing.txt

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<210> 9
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<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:Artificially
        synthesized sequence

<400> 9
gggggcggcc gcgcgcaaca cgatgaagcc gtagac
                                         36

<210> 10
<211> 36
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:Artificially
        synthesized sequence

<400> 10
ggttgagata aaagagcttt tggcgcggcc gccttt
                                         36

<210> 11
<211> 36
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:Artificially
        synthesized sequence

<400> 11
gggggcggcc gcgatattga tatgacccaa tctcca
                                         36

<210> 12
<211> 36
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:Artificially
        synthesized sequence

<400> 12
cccgcggccg cccgaggaga cggtgactga ggtccc
                                         36

<210> 13
<211> 36
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:Artificially
        synthesized sequence

<400> 13
gggggcggcc gcgatgtgca gcttcaggag tcggga
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# Sequence Listing.txt

<210> 14  
 <211> 30  
 <212> DNA  
 <213> Artificial Sequence  
  
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 <223> Description of Artificial Sequence:Artificially  
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 ggggcggccg ccttttatTT ccaactttgt 30  
  
 <210> 15  
 <211> 31  
 <212> DNA  
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 synthesized sequence  
  
 <400> 15  
 ccagttggac ggcggccgcc ctgcaccgaa c 31  
  
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 <211> 31  
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 <400> 16  
 gttcgggtgca gggcggccgc cgtccaactg g 31  
  
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 <211> 34  
 <212> DNA  
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 <400> 17  
 caatccagat tggggcggcc gccctgcacc gaac 34  
  
 <210> 18  
 <211> 34  
 <212> DNA  
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 <220>  
 <223> Description of Artificial Sequence:Artificially  
 synthesized sequence

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<400> 18  
gttcggtgca gggcggccgc cccaatctgg attg 34

<210> 19  
<211> 31  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Artificially  
synthesized sequence

<400> 19  
ggtaggagcg ggcggccgcc ctgcaccgaa c 31

<210> 20  
<211> 31  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Artificially  
synthesized sequence

<400> 20  
gttcggtgca gggcggccgc ccgctcctac c 31

<210> 21  
<211> 30  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Artificially  
synthesized sequence

<400> 21  
cctcaggccg gcggccgccc tgcaccgaac 30

<210> 22  
<211> 30  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Artificially  
synthesized sequence

<400> 22  
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<210> 23  
<211> 31  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Artificially  
synthesized sequence

# Sequence Listing.txt

synthesized sequence

<400> 23  
cagagtgagg ggcggccgcc ctgcaccgaa c 31

<210> 24  
<211> 31  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 24  
gttcggtgca ggcggccgc ccctcactct g 31

<210> 25  
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<212> DNA  
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<220>  
<223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 25  
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<210> 26  
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<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 26  
gcctgaggg ctgcggccgcc cgctcctacc 30

<210> 27  
<211> 10  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 27  
Ser Ala Trp Arg His Pro Gln Phe Gly Gly  
1 5 10

<210> 28  
<211> 8  
<212> PRT  
<213> Artificial Sequence

# Sequence Listing.txt

<220>

<223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 28

Trp Ser His Pro Gln Phe Glu Lys  
1 5

<210> 29

<211> 116

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 29

Val Asp Asn Lys Phe Asn Lys Glu Gln Gln Asn Ala Phe Tyr Glu Ile  
1 5 10 15

Leu His Leu Pro Asn Leu Asn Glu Glu Gln Arg Asn Ala Phe Ile Gln  
20 25 30

Ser Leu Lys Asp Asp Pro Ser Gln Ser Ala Asn Leu Leu Ala Glu Ala  
35 40 45

Lys Lys Leu Asn Asp Ala Gln Ala Pro Lys Val Asp Asn Lys Phe Asn  
50 55 60

Lys Glu Gln Gln Asn Ala Phe Tyr Glu Ile Leu His Leu Pro Asn Leu  
65 70 75 80

Asn Glu Glu Gln Arg Asn Ala Phe Ile Gln Ser Leu Lys Asp Asp Pro  
85 90 95

Ser Gln Ser Ala Asn Leu Leu Ala Glu Ala Lys Lys Leu Asn Asp Ala  
100 105 110

Gln Ala Pro Lys  
115

<210> 30

<211> 1134

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 30

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| atggggacga | atctttctgt | tccaatcct  | ctgggattct | ttcccgatca | ccagttggac | 60  |
| ggcggccgcg | cgcaacacga | tgaagccgta | gacaacaaat | tcaacaaaga | acaacaaaac | 120 |
| gcgttctatg | agatcttaca | tttacctaac | ttaaacgaag | aacaacgaaa | cgccttcac  | 180 |
| caaagttaa  | aagatgaccc | aagccaaagc | gctaaccctt | tagcagaagc | taaaaagcta | 240 |
| aatgatgctc | aggcgccgaa | agtagacaac | aaattcaaca | aagaacaaca | aaacgcgttc | 300 |
| tatgagatct | tacatttacc | taacttaaac | gaagaacaac | gaaacgcctt | catccaaagt | 360 |
| ttaaaagatg | acccaagcca | aagcgctaac | cttttagcag | aagctaaaaa | gctaaatgat | 420 |
| gctcaggcgc | cgaaagcggc | cgcccctgca | ccgaacatgg | agaacacaac | atcaggattc | 480 |

# Sequence Listing.txt

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ctaggacccc tgctcgtgtt acaggcgggg tttttcttgt tgacaagaat cctcacaata 540
ccacagagtc tagactcgtg gtggacttct ctcaattttc taggggggagc acccacgtgt 600
cctggccaaa attcgcagtc cccaacctcc aatcactcac caacctcttg tcctccaatt 660
tgtcctggct atcgcctggat gtgtctgcgg cgttttatca tattcctctt catcctgctg 720
ctatgcctca tcttcttgtt ggttcttctg gactaccaag gtatgttgcc cgtttgtcct 780
ctacttccag gaacatcaac caccagcacg gggccatgca agacctgcac gattcctgct 840
caaggaacct ctatgtttcc ctcttgttgc tgtacaaaac cttcggacgg aaactgcact 900
tgtattccca tcccatcatc ctgggctttc gcaagattcc tatgggagtg ggcctcagtc 960
cgtttctcct ggctcagttt actagtgcc a tttgttcagt ggttcgtagg gctttccccc 1020
actgtttggc tttcagttat atggatgatg tggatttggg ggccaagtct gtacaacatc 1080
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<210> 31

<211> 378

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 31

Met Gly Thr Asn Leu Ser Val Pro Asn Pro Leu Gly Phe Phe Pro Asp  
1 5 10 15

His Gln Leu Asp Gly Gly Arg Ala Gln His Asp Glu Ala Val Asp Asn  
20 25 30

Lys Phe Asn Lys Glu Gln Gln Asn Ala Phe Tyr Glu Ile Leu His Leu  
35 40 45

Pro Asn Leu Asn Glu Glu Gln Arg Asn Ala Phe Ile Gln Ser Leu Lys  
50 55 60

Asp Asp Pro Ser Gln Ser Ala Asn Leu Leu Ala Glu Ala Lys Lys Leu  
65 70 75 80

Asn Asp Ala Gln Ala Pro Lys Val Asp Asn Lys Phe Asn Lys Glu Gln  
85 90 95

Gln Asn Ala Phe Tyr Glu Ile Leu His Leu Pro Asn Leu Asn Glu Glu  
100 105 110

Gln Arg Asn Ala Phe Ile Gln Ser Leu Lys Asp Asp Pro Ser Gln Ser  
115 120 125

Ala Asn Leu Leu Ala Glu Ala Lys Lys Leu Asn Asp Ala Gln Ala Pro  
130 135 140

Lys Ala Ala Ala Pro Ala Pro Asn Met Glu Asn Thr Thr Ser Gly Phe  
145 150 155 160

Leu Gly Pro Leu Leu Val Leu Gln Ala Gly Phe Phe Leu Leu Thr Arg  
165 170 175

Ile Leu Thr Ile Pro Gln Ser Leu Asp Ser Trp Trp Thr Ser Leu Asn  
180 185 190

Phe Leu Gly Gly Ala Pro Thr Cys Pro Gly Gln Asn Ser Gln Ser Pro  
195 200 205

Thr Ser Asn His Ser Pro Thr Ser Cys Pro Pro Ile Cys Pro Gly Tyr  
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210

215

220

```

Arg Trp Met Cys Leu Arg Arg Phe Ile Ile Phe Leu Phe Ile Leu Leu
225                230                235                240

Leu Cys Leu Ile Phe Leu Leu Val Leu Leu Asp Tyr Gln Gly Met Leu
                245                250                255

Pro Val Cys Pro Leu Leu Pro Gly Thr Ser Thr Thr Ser Thr Gly Pro
                260                265                270

Cys Lys Thr Cys Thr Ile Pro Ala Gln Gly Thr Ser Met Phe Pro Ser
                275                280                285

Cys Cys Cys Thr Lys Pro Ser Asp Gly Asn Cys Thr Cys Ile Pro Ile
290                295                300

Pro Ser Ser Trp Ala Phe Ala Arg Phe Leu Trp Glu Trp Ala Ser Val
305                310                315                320

Arg Phe Ser Trp Leu Ser Leu Leu Val Pro Phe Val Gln Trp Phe Val
                325                330                335

Gly Leu Ser Pro Thr Val Trp Leu Ser Val Ile Trp Met Met Trp Tyr
                340                345                350

Trp Gly Pro Ser Leu Tyr Asn Ile Leu Ser Pro Phe Leu Pro Leu Leu
                355                360                365

Pro Ile Phe Phe Cys Leu Trp Val Tyr Ile
370                375

```

&lt;210&gt; 32

&lt;211&gt; 1134

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence:Artificially synthesized sequence

&lt;400&gt; 32

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atgggggacga atcttttctgt tcccaatcct ctgggattct ttcccgatca ccagttggac 60
ggcgggccgcg cgcaacacga tgaagccgta gacaacaaat tcaacaaaga acaacaaaac 120
gcgttctatg agatcttaca ttacctaac ttaaacgaag aacaacgaaa cgccttcata 180
caaagttaa aagatgaccc aagccaaagc gctaaccctt tagcagaagc taaaaagcta 240
aatgatgctc aggcgccgaa agtagacaac aaattcaaca agaacaaca aaacgcgttc 300
tatgagatct tacatttacc taacttaaac gaagaacaac gaaacgcctt catccaaagt 360
ttaaagatg acccaagcca aagcgctaac cttttagcag aagctaaaaa gctaaatgat 420
gctcaggcgc cgaaagcggc cgcccctgca ccgaacatgg agaacacaac atcaggattc 480
ctaggacccc tgctcgtgtt acaggcgggg tttttcttgt tgacaagaat cctcacaata 540
ccacagagtc tagactcgtg gtggacttct ctcaattttc tagggggagc acccacgtgt 600
cctggcctaaa attcgcagtc cccaacctcc aatcactcac caacctcttg tcttccaatt 660
tgtcctggct atcgtctggat gtgtctgcgg cgttttatca tattctcttt catcctgctg 720
ctatgccatc tcttcttggt ggttcttctg gactaccaag gtatgttgcc cgtttgcctt 780
ctacttccag gaacatcaac caccagcacg gggccatgca agacctgcac gattcctgct 840
cgaggaacct ctatgtttcc ctcttggtgc tgtacaaaac cttcggacgg aaactgcact 900
tgtattccca tcccatcatc ctgggctttc gcaagattcc tatgggagtg ggcctcagtc 960
cgtttctcct ggctcagttt actagtgcc a ttgttcagt ggttcgtagg gctttcccc 1020
actgtttggc tttcagttat atggatgatg tggtattggg ggccaagtct gtacaacatc 1080
ttgagtcctt ttttacctt attaccaatt ttctttgtc tttgggtata catt 1134

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# Sequence Listing.txt

<210> 33

<211> 378

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 33

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Met Gly Thr Asn Leu Ser Val Pro Asn Pro Leu Gly Phe Phe Pro Asp
 1          5          10          15
His Gln Leu Asp Gly Gly Arg Ala Gln His Asp Glu Ala Val Asp Asn
          20          25          30
Lys Phe Asn Lys Glu Gln Gln Asn Ala Phe Tyr Glu Ile Leu His Leu
          35          40          45
Pro Asn Leu Asn Glu Glu Gln Arg Asn Ala Phe Ile Gln Ser Leu Lys
          50          55          60
Asp Asp Pro Ser Gln Ser Ala Asn Leu Leu Ala Glu Ala Lys Lys Leu
 65          70          75          80
Asn Asp Ala Gln Ala Pro Lys Val Asp Asn Lys Phe Asn Lys Glu Gln
          85          90          95
Gln Asn Ala Phe Tyr Glu Ile Leu His Leu Pro Asn Leu Asn Glu Glu
          100          105          110
Gln Arg Asn Ala Phe Ile Gln Ser Leu Lys Asp Asp Pro Ser Gln Ser
          115          120          125
Ala Asn Leu Leu Ala Glu Ala Lys Lys Leu Asn Asp Ala Gln Ala Pro
          130          135          140
Lys Ala Ala Ala Pro Ala Pro Asn Met Glu Asn Thr Thr Ser Gly Phe
145          150          155          160
Leu Gly Pro Leu Leu Val Leu Gln Ala Gly Phe Phe Leu Leu Thr Arg
          165          170          175
Ile Leu Thr Ile Pro Gln Ser Leu Asp Ser Trp Trp Thr Ser Leu Asn
          180          185          190
Phe Leu Gly Gly Ala Pro Thr Cys Pro Gly Gln Asn Ser Gln Ser Pro
          195          200          205
Thr Ser Asn His Ser Pro Thr Ser Cys Pro Pro Ile Cys Pro Gly Tyr
          210          215          220
Arg Trp Met Cys Leu Arg Arg Phe Ile Ile Phe Leu Phe Ile Leu Leu
225          230          235          240
Leu Cys Leu Ile Phe Leu Leu Val Leu Leu Asp Tyr Gln Gly Met Leu
          245          250          255
Pro Val Cys Pro Leu Leu Pro Gly Thr Ser Thr Thr Ser Thr Gly Pro
          260          265          270
Cys Lys Thr Cys Thr Ile Pro Ala Arg Gly Thr Ser Met Phe Pro Ser

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## Sequence Listing.txt

275

280

285

Cys Cys Cys Thr Lys Pro Ser Asp Gly Asn Cys Thr Cys Ile Pro Ile  
 290 295 300  
 Pro Ser Ser Trp Ala Phe Ala Arg Phe Leu Trp Glu Trp Ala Ser Val  
 305 310 315 320  
 Arg Phe Ser Trp Leu Ser Leu Leu Val Pro Phe Val Gln Trp Phe Val  
 325 330 335  
 Gly Leu Ser Pro Thr Val Trp Leu Ser Val Ile Trp Met Met Trp Tyr  
 340 345 350  
 Trp Gly Pro Ser Leu Tyr Asn Ile Leu Ser Pro Phe Leu Pro Leu Leu  
 355 360 365  
 Pro Ile Phe Phe Cys Leu Trp Val Tyr Ile  
 370 375

&lt;210&gt; 34

&lt;211&gt; 1134

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence:Artificially synthesized sequence

&lt;400&gt; 34

|             |             |            |            |            |            |      |
|-------------|-------------|------------|------------|------------|------------|------|
| atgggggacga | atcttttctgt | tcccaatcct | ctgggattct | ttcccgatca | ccagttggac | 60   |
| ggcgggccgcg | cgcaacacga  | tgaagccgta | gacaacaaat | tcaacaaaga | acaacaaaac | 120  |
| gcgttctatg  | agatcttaca  | tttacctaac | ttaaacgaag | aacaacgaaa | cgcttctatc | 180  |
| caaagtttaa  | aagatgaccc  | aagccaaagc | gctaaccctt | tagcagaagc | taaaaagcta | 240  |
| aatgatgctc  | agggcgccgaa | agtagacaac | aaattcaaca | aagaacaaca | aaacgcgttc | 300  |
| tatgagatct  | tacatttacc  | taacttaaac | gaagaacaac | gaaacgcctt | catccaaagt | 360  |
| ttaaaagatg  | acccaagcca  | aagcgctaac | cttttagcag | aagctaaaaa | gctaaatgat | 420  |
| gctcaggcgc  | cgaaaagcggc | cgcccctgca | ccgaacatgg | agaacacaac | atcaggattc | 480  |
| ctaggacccc  | tgctcgtgtt  | acaggcgggg | tttttcttgt | tgacaagaat | cctcacaata | 540  |
| ccacagagtc  | tagactcgtg  | gtggacttct | ctcaattttc | tagggggagc | acccacgtgt | 600  |
| cctggccaaa  | attcgcagtc  | cccaacctcc | aatcactcac | caacctcttg | tcctccaatt | 660  |
| tgtcctggct  | atcgctggat  | gtgtctgcgg | cgtttatca  | tattcctctt | catcctgctg | 720  |
| ctatgcctca  | tcttcttgtt  | ggttcttctg | gactaccaag | gtatgttgcc | cgtttgcctt | 780  |
| ctacttccag  | gaacatcaac  | caccagcacg | gggccatgca | agacctgcac | gattcctgct | 840  |
| caaggaacct  | ctatgtttcc  | ctcttggtgc | tgtacaaaac | cttcggacag | aaactgcact | 900  |
| tgtattccca  | tcccatcatc  | ctgggctttc | gcaagattcc | tatgggagtg | ggcctcagtc | 960  |
| cgtttctcct  | ggctcagttt  | actagtgcc  | ttgttcagt  | ggttcgtagg | gctttccccc | 1020 |
| actgtttggc  | tttcagttat  | atggatgatg | tggtattggg | ggccaagtct | gtacaacatc | 1080 |
| ttgagtcctt  | ttttacctct  | attaccaatt | ttcttttgtc | tttgggtata | catt       | 1134 |

&lt;210&gt; 35

&lt;211&gt; 378

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence:Artificially synthesized sequence

&lt;400&gt; 35

Met Gly Thr Asn Leu Ser Val Pro Asn Pro Leu Gly Phe Phe Pro Asp

## Sequence Listing.txt

| 1               | 5                   | 10                  | 15              |
|-----------------|---------------------|---------------------|-----------------|
| His Gln Leu Asp | Gly Gly Arg Ala Gln | His Asp Glu Ala Val | Asp Asn         |
|                 | 20                  | 25                  | 30              |
| Lys Phe Asn Lys | Glu Gln Gln Asn     | Ala Phe Tyr Glu Ile | Leu His Leu     |
|                 | 35                  | 40                  | 45              |
| Pro Asn Leu Asn | Glu Glu Gln Arg     | Asn Ala Phe Ile     | Gln Ser Leu Lys |
|                 | 50                  | 55                  | 60              |
| Asp Asp Pro Ser | Gln Ser Ala Asn     | Leu Leu Ala Glu     | Ala Lys Lys Leu |
|                 | 65                  | 70                  | 75              |
| Asn Asp Ala Gln | Ala Pro Lys Val     | Asp Asn Lys Phe     | Asn Lys Glu Gln |
|                 | 85                  | 90                  | 95              |
| Gln Asn Ala Phe | Tyr Glu Ile Leu     | His Leu Pro Asn     | Leu Asn Glu Glu |
|                 | 100                 | 105                 | 110             |
| Gln Arg Asn Ala | Phe Ile Gln Ser     | Leu Lys Asp Asp     | Pro Ser Gln Ser |
|                 | 115                 | 120                 | 125             |
| Ala Asn Leu Leu | Ala Glu Ala Lys     | Lys Leu Asn Asp     | Ala Gln Ala Pro |
|                 | 130                 | 135                 | 140             |
| Lys Ala Ala Ala | Pro Ala Pro Asn     | Met Glu Asn Thr     | Thr Ser Gly Phe |
|                 | 145                 | 150                 | 155             |
| Leu Gly Pro Leu | Leu Val Leu Gln     | Ala Gly Phe Phe     | Leu Leu Thr Arg |
|                 | 165                 | 170                 | 175             |
| Ile Leu Thr Ile | Pro Gln Ser Leu     | Asp Ser Trp Trp     | Thr Ser Leu Asn |
|                 | 180                 | 185                 | 190             |
| Phe Leu Gly Gly | Ala Pro Thr Cys     | Pro Gly Gln Asn     | Ser Gln Ser Pro |
|                 | 195                 | 200                 | 205             |
| Thr Ser Asn His | Ser Pro Thr Ser     | Cys Pro Pro Ile     | Cys Pro Gly Tyr |
|                 | 210                 | 215                 | 220             |
| Arg Trp Met Cys | Leu Arg Arg Phe     | Ile Ile Phe Leu     | Phe Ile Leu Leu |
|                 | 225                 | 230                 | 235             |
| Leu Cys Leu Ile | Phe Leu Leu Val     | Leu Leu Asp Tyr     | Gln Gly Met Leu |
|                 | 245                 | 250                 | 255             |
| Pro Val Cys Pro | Leu Leu Pro Gly     | Thr Ser Thr Thr     | Ser Thr Gly Pro |
|                 | 260                 | 265                 | 270             |
| Cys Lys Thr Cys | Thr Ile Pro Ala     | Gln Gly Thr Ser     | Met Phe Pro Ser |
|                 | 275                 | 280                 | 285             |
| Cys Cys Cys Thr | Lys Pro Ser Asp     | Arg Asn Cys Thr     | Cys Ile Pro Ile |
|                 | 290                 | 295                 | 300             |
| Pro Ser Ser Trp | Ala Phe Ala Arg     | Phe Leu Trp Glu     | Trp Ala Ser Val |
|                 | 305                 | 310                 | 315             |
| Arg Phe Ser Trp | Leu Ser Leu Leu     | Val Pro Phe Val     | Gln Trp Phe Val |
|                 | 325                 | 330                 | 335             |
| Gly Leu Ser Pro | Thr Val Trp Leu     | Ser Val Ile Trp     | Met Met Trp Tyr |

340

Sequence Listing.txt  
345 350

Trp Gly Pro Ser Leu Tyr Asn Ile Leu Ser Pro Phe Leu Pro Leu Leu  
355 360 365

Pro Ile Phe Phe Cys Leu Trp Val Tyr Ile  
370 375

&lt;210&gt; 36

&lt;211&gt; 1134

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence:Artificially  
synthesized sequence

&lt;400&gt; 36

```

atggggacga atctttctgt tcccaatcct ctgggattct ttcccgatca ccagttggac 60
ggcgggccgcg cgcaacacga tgaagccgta gacaacaaat tcaacaaaga acaacaaaac 120
gcgttctatg agatcttaca ttacctaac ttaaacgaag aacaacgaaa cgccttcac 180
caaagtttaa aagatgaccc aagccaaagc gctaaccctt tagcagaagc taaaaagcta 240
aatgatgctc aggcgccgaa agtagacaac aaattcaaca agaacaaca aaacgcgttc 300
tatgagatct tacatttacc taacttaaac gaagaacaac gaaacgcctt catccaaagt 360
ttaaaagatg acccaagcca aagcgctaac cttttagcag aagctaaaaa gctaaatgat 420
gctcaggcgc cgaaagcggc cgcccctgca ccgaacatgg agaacacaac atcaggattc 480
ctaggacccc tgctcgtggt acaggcgagg tttttcttgt tgacaagaat cctcacaata 540
ccacagagtc tagactcgtg gtggacttct ctcaattttc tagggggagc acccacgtgt 600
cctggcctaaa attcgcagtc cccaacctcc aatcactcac caacctcttg tcctccaatt 660
tgtcctggct atcgtctggat gtgtctgcgg cgttttatca tattcctctt catcctgctg 720
ctatgcctca tcttcttgtt ggttcttctg gactaccaag gtatgttgcc cgtttgctct 780
ctacttccag gaacatcaac caccagcacg gggccatgca agacctgcac gattcctgct 840
cgaggaacct ctatgtttcc ctcttggttg tgtacaaaac cttcggacag aaactgcact 900
tgtattcca tcccatcatc ctgggctttc gcaagattcc tatgggagtg ggcctcagtc 960
cgtttctcct ggctcagttt actagtgcc a tttgttcagt ggttcgtagg gctttccccc 1020
actgtttggc tttcagttat atggatgatg tggatttggg ggccaagtct gtacaacatc 1080
ttgagtcctt ttttacctct attaccaatt ttcttttgtc tttgggtata catt 1134

```

&lt;210&gt; 37

&lt;211&gt; 378

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence:Artificially  
synthesized sequence

&lt;400&gt; 37

Met Gly Thr Asn Leu Ser Val Pro Asn Pro Leu Gly Phe Phe Pro Asp  
1 5 10 15

His Gln Leu Asp Gly Gly Arg Ala Gln His Asp Glu Ala Val Asp Asn  
20 25 30

Lys Phe Asn Lys Glu Gln Gln Asn Ala Phe Tyr Glu Ile Leu His Leu  
35 40 45

Pro Asn Leu Asn Glu Glu Gln Arg Asn Ala Phe Ile Gln Ser Leu Lys  
50 55 60

Asp Asp Pro Ser Gln Ser Ala Asn Leu Leu Ala Glu Ala Lys Lys Leu  
Page 13

## Sequence Listing.txt

```

65          70          75          80
Asn Asp Ala Gln Ala Pro Lys Val Asp Asn Lys Phe Asn Lys Glu Gln
      85          90          95
Gln Asn Ala Phe Tyr Glu Ile Leu His Leu Pro Asn Leu Asn Glu Glu
      100         105         110
Gln Arg Asn Ala Phe Ile Gln Ser Leu Lys Asp Asp Pro Ser Gln Ser
      115         120         125
Ala Asn Leu Leu Ala Glu Ala Lys Lys Leu Asn Asp Ala Gln Ala Pro
      130         135         140
Lys Ala Ala Ala Pro Ala Pro Asn Met Glu Asn Thr Thr Ser Gly Phe
      145         150         155         160
Leu Gly Pro Leu Leu Val Leu Gln Ala Gly Phe Phe Leu Leu Thr Arg
      165         170         175
Ile Leu Thr Ile Pro Gln Ser Leu Asp Ser Trp Trp Thr Ser Leu Asn
      180         185         190
Phe Leu Gly Gly Ala Pro Thr Cys Pro Gly Gln Asn Ser Gln Ser Pro
      195         200         205
Thr Ser Asn His Ser Pro Thr Ser Cys Pro Pro Ile Cys Pro Gly Tyr
      210         215         220
Arg Trp Met Cys Leu Arg Arg Phe Ile Ile Phe Leu Phe Ile Leu Leu
      225         230         235         240
Leu Cys Leu Ile Phe Leu Leu Val Leu Leu Asp Tyr Gln Gly Met Leu
      245         250         255
Pro Val Cys Pro Leu Leu Pro Gly Thr Ser Thr Thr Ser Thr Gly Pro
      260         265         270
Cys Lys Thr Cys Thr Ile Pro Ala Arg Gly Thr Ser Met Phe Pro Ser
      275         280         285
Cys Cys Cys Thr Lys Pro Ser Asp Arg Asn Cys Thr Cys Ile Pro Ile
      290         295         300
Pro Ser Ser Trp Ala Phe Ala Arg Phe Leu Trp Glu Trp Ala Ser Val
      305         310         315         320
Arg Phe Ser Trp Leu Ser Leu Leu Val Pro Phe Val Gln Trp Phe Val
      325         330         335
Gly Leu Ser Pro Thr Val Trp Leu Ser Val Ile Trp Met Met Trp Tyr
      340         345         350
Trp Gly Pro Ser Leu Tyr Asn Ile Leu Ser Pro Phe Leu Pro Leu Leu
      355         360         365
Pro Ile Phe Phe Cys Leu Trp Val Tyr Ile
      370         375

```

<210> 38  
 <211> 933  
 <212> DNA

# Sequence Listing.txt

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 38

```
atgggggacga atcttttctgt tcccaatcct ctgggattct ttcccgatca ccagttggac 60
ggcgggcccga tgaactctga ttccgaatgc ccgctgtctc atgacgggta ctgcctgcat 120
gatggcgat gcatgtacat cgaagctctg gacaaatacg catgcaactg tgtttaggt 180
tacatcgcg aacgttgcca gtatcgcgac ctgaaatggg gggaactgcg taaggcggcc 240
gcccctgcac cgaacatgga gaacacaaca tcaggattcc taggaccctt gctcgtgta 300
caggcggggg ttttcttgtt gacaagaatc ctcaataac cacagagtct agactcgtgg 360
tggacttctc tcaattttct agggggagca cccacgtgtc ctggccaaaa ttcgcagtcc 420
ccaacctcca atcactcacc aacctcttgt cctccaattt gtcctggcta tcgctggatg 480
tgtctgcggc gttttatcat attcctcttc atcctgctgc tatgcctcat cttcttgttg 540
gttcttctgg actaccaagg tatgttgccc gtttgcctc tacttccagg aacatcaacc 600
accagcacgg ggccatgcaa gacctgcacg attcctgctc aaggaacctc tatgtttccc 660
tcttgttgct gtacaaaacc ttcggacgga aactgcactt gtattcccat cccatcatcc 720
tgggctttcg caagattcct atgggagtg gcctcagtc gtttctcctg gctcagttta 780
ctagtgccat ttgttcagtg gttcgtaggg ctttcccca ctgtttggct ttcagttata 840
tggatgatgt ggtattgggg gccaaagtct tacaacatct tgagtcctt tttacctcta 900
ttaccaattt tcttttgtct ttgggtatac att 933
```

<210> 39

<211> 311

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 39

```
Met Gly Thr Asn Leu Ser Val Pro Asn Pro Leu Gly Phe Phe Pro Asp
 1          5          10          15
His Gln Leu Asp Gly Gly Arg Met Asn Ser Asp Ser Glu Cys Pro Leu
          20          25          30
Ser His Asp Gly Tyr Cys Leu His Asp Gly Val Cys Met Tyr Ile Glu
          35          40          45
Ala Leu Asp Lys Tyr Ala Cys Asn Cys Val Val Gly Tyr Ile Gly Glu
          50          55          60
Arg Cys Gln Tyr Arg Asp Leu Lys Trp Trp Glu Leu Arg Lys Ala Ala
          65          70          75          80
Ala Pro Ala Pro Asn Met Glu Asn Thr Thr Ser Gly Phe Leu Gly Pro
          85          90          95
Leu Leu Val Leu Gln Ala Gly Phe Phe Leu Leu Thr Arg Ile Leu Thr
          100          105          110
Ile Pro Gln Ser Leu Asp Ser Trp Trp Thr Ser Leu Asn Phe Leu Gly
          115          120          125
Gly Ala Pro Thr Cys Pro Gly Gln Asn Ser Gln Ser Pro Thr Ser Asn
          130          135          140
His Ser Pro Thr Ser Cys Pro Pro Ile Cys Pro Gly Tyr Arg Trp Met
```

## Sequence Listing.txt

```

145             150             155             160
Cys Leu Arg Arg Phe Ile Ile Phe Leu Phe Ile Leu Leu Leu Cys Leu
                165                170                175
Ile Phe Leu Leu Val Leu Leu Asp Tyr Gln Gly Met Leu Pro Val Cys
                180                185                190
Pro Leu Leu Pro Gly Thr Ser Thr Thr Ser Thr Gly Pro Cys Lys Thr
                195                200                205
Cys Thr Ile Pro Ala Gln Gly Thr Ser Met Phe Pro Ser Cys Cys Cys
                210                215                220
Thr Lys Pro Ser Asp Gly Asn Cys Thr Cys Ile Pro Ile Pro Ser Ser
                225                230                235
Trp Ala Phe Ala Arg Phe Leu Trp Glu Trp Ala Ser Val Arg Phe Ser
                245                250                255
Trp Leu Ser Leu Leu Val Pro Phe Val Gln Trp Phe Val Gly Leu Ser
                260                265                270
Pro Thr Val Trp Leu Ser Val Ile Trp Met Met Trp Tyr Trp Gly Pro
                275                280                285
Ser Leu Tyr Asn Ile Leu Ser Pro Phe Leu Pro Leu Leu Pro Ile Phe
                290                295                300
Phe Cys Leu Trp Val Tyr Ile
305                310

```

&lt;210&gt; 40

&lt;211&gt; 933

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence:Artificially  
synthesized sequence

&lt;400&gt; 40

```

atgggggacga atcttttctgt tcccaatcct ctgggattct ttcccgatca ccagttggac 60
ggcgggcccga tgaactctga ttccgaatgc ccgctgtctc atgacgggta ctgcctgcat 120
gatggcgat gcatgtacat cgaagctctg gacaaatagc catgcaactg tgttgtaggt 180
tacatcggcg aacgttgcca gtatcgcgac ctgaaatggg gggaactgcg taaggcggcc 240
gccccctgcac cgaacatgga gaacacaaca tcaggattcc taggaccctt gctcgtgtta 300
caggcgggggt ttttcttggt gacaagaatc ctcacaatac cacagagtct agactcgtgg 360
tggacttctc tcaattttct agggggagca cccacgtgtc ctggccaaaa ttcgcagtcc 420
ccaacctcca atcactcacc aacctcttgt cctccaattt gtcctggcta tcgctggatg 480
tgtctgcggc gttttatcat attcctcttc atcctgctgc tatgcctcat cttcttggtg 540
gttcttctgg actaccaagg tatgttgccc gtttgcctc tacttccagg aacatcaacc 600
accagcacgg ggccatgcaa gacctgcacg attcctgctc gaggaacctc tatgtttccc 660
tcttggtgct gtacaaaacc ttcggacgga aactgcactt gtattcccat cccatcatcc 720
tgggctttcg caagattcct atgggagtg gacctcagtc gtttctcctg gctcagttta 780
ctagtgccat ttgttcagtg gttcgtaggg ctttcccca ctgtttggct ttcagttata 840
tggatgatgt ggtattgggg gccaaagtct tacaacatct tgagtcctct tttacctcta 900
ttaccaattt tcttttgtct ttgggtatac att 933

```

&lt;210&gt; 41

&lt;211&gt; 311



Sequence Listing.txt

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 41

```

Met Gly Thr Asn Leu Ser Val Pro Asn Pro Leu Gly Phe Phe Pro Asp
 1          5          10          15
His Gln Leu Asp Gly Gly Arg Met Asn Ser Asp Ser Glu Cys Pro Leu
          20          25          30
Ser His Asp Gly Tyr Cys Leu His Asp Gly Val Cys Met Tyr Ile Glu
          35          40          45
Ala Leu Asp Lys Tyr Ala Cys Asn Cys Val Val Gly Tyr Ile Gly Glu
          50          55          60
Arg Cys Gln Tyr Arg Asp Leu Lys Trp Trp Glu Leu Arg Lys Ala Ala
          65          70          75          80
Ala Pro Ala Pro Asn Met Glu Asn Thr Thr Ser Gly Phe Leu Gly Pro
          85          90          95
Leu Leu Val Leu Gln Ala Gly Phe Phe Leu Leu Thr Arg Ile Leu Thr
          100          105          110
Ile Pro Gln Ser Leu Asp Ser Trp Trp Thr Ser Leu Asn Phe Leu Gly
          115          120          125
Gly Ala Pro Thr Cys Pro Gly Gln Asn Ser Gln Ser Pro Thr Ser Asn
          130          135          140
His Ser Pro Thr Ser Cys Pro Pro Ile Cys Pro Gly Tyr Arg Trp Met
          145          150          155          160
Cys Leu Arg Arg Phe Ile Ile Phe Leu Phe Ile Leu Leu Leu Cys Leu
          165          170          175
Ile Phe Leu Leu Val Leu Leu Asp Tyr Gln Gly Met Leu Pro Val Cys
          180          185          190
Pro Leu Leu Pro Gly Thr Ser Thr Thr Ser Thr Gly Pro Cys Lys Thr
          195          200          205
Cys Thr Ile Pro Ala Arg Gly Thr Ser Met Phe Pro Ser Cys Cys Cys
          210          215          220
Thr Lys Pro Ser Asp Gly Asn Cys Thr Cys Ile Pro Ile Pro Ser Ser
          225          230          235          240
Trp Ala Phe Ala Arg Phe Leu Trp Glu Trp Ala Ser Val Arg Phe Ser
          245          250          255
Trp Leu Ser Leu Leu Val Pro Phe Val Gln Trp Phe Val Gly Leu Ser
          260          265          270
Pro Thr Val Trp Leu Ser Val Ile Trp Met Met Trp Tyr Trp Gly Pro
          275          280          285
Ser Leu Tyr Asn Ile Leu Ser Pro Phe Leu Pro Leu Leu Pro Ile Phe

```

Sequence Listing.txt  
300

290

295

Phe Cys Leu Trp Val Tyr Ile  
305 310

<210> 42  
<211> 933  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Artificially  
synthesized sequence

<400> 42  
atgggggacga atcttttctgt tcccaatcct ctgggattct ttcccgatca ccagttggac 60  
ggcgggccgca tgaactctga ttccgaatgc ccgctgtctc atgacgggta ctgcctgcat 120  
gatggcgat gcatgtacat cgaagctctg gacaaatag catgcaactg tgttgtaggt 180  
tacatcgggc aacgttgcca gtatcgcgac ctgaaatggg gggaactgcg taaggcggcc 240  
gccccctgcac cgaacatgga gaacacaaca tcaggattcc taggaccctt gctcgtgtta 300  
caggcgggggt ttttcttggt gacaagaatc ctcacaatac cacagagtct agactcgtgg 360  
tggacttctc tcaattttct agggggagca cccacgtgtc ctggccaaaa ttcgcagtcc 420  
ccaacctcca atcactcacc aacctcttgt cctccaattt gtcctggcta tcgctggatg 480  
tgtctgcggc gttttatcat attcctcttc atcctgtctc tatgcctcat cttcttggtg 540  
gttcttctgg actaccaagg tatgttgccc gtttgctctc tacttccagg aacatcaacc 600  
accagcacgg ggccatgcaa gacctgcacg attcctgtct aaggaacctc tatgtttccc 660  
tcttggtgct gtacaaaacc ttcggacaga aactgcactt gtattcccat cccatcatcc 720  
tgggctttcg caagattcct atgggagtg gacctcagtc gtttctcctg gctcagttta 780  
ctagtgccat ttgttcagtg gttcgtaggg ctttcccca ctgtttggct ttcagttata 840  
tggatgatgt ggtattgggg gccaaagtctg tacaacatct tgagtcctct tttacctcta 900  
ttaccaattt tcttttgtct ttgggtatac att 933

<210> 43  
<211> 311  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Artificially  
synthesized sequence

<400> 43  
Met Gly Thr Asn Leu Ser Val Pro Asn Pro Leu Gly Phe Phe Pro Asp  
1 5 10 15  
His Gln Leu Asp Gly Gly Arg Met Asn Ser Asp Ser Glu Cys Pro Leu  
20 25 30  
Ser His Asp Gly Tyr Cys Leu His Asp Gly Val Cys Met Tyr Ile Glu  
35 40 45  
Ala Leu Asp Lys Tyr Ala Cys Asn Cys Val Val Gly Tyr Ile Gly Glu  
50 55 60  
Arg Cys Gln Tyr Arg Asp Leu Lys Trp Trp Glu Leu Arg Lys Ala Ala  
65 70 75 80  
Ala Pro Ala Pro Asn Met Glu Asn Thr Thr Ser Gly Phe Leu Gly Pro  
85 90 95  
Leu Leu Val Leu Gln Ala Gly Phe Phe Leu Leu Thr Arg Ile Leu Thr

Sequence Listing.txt

100

105

110

```

Ile Pro Gln Ser Leu Asp Ser Trp Trp Thr Ser Leu Asn Phe Leu Gly
      115                      120                      125
Gly Ala Pro Thr Cys Pro Gly Gln Asn Ser Gln Ser Pro Thr Ser Asn
      130                      135                      140
His Ser Pro Thr Ser Cys Pro Pro Ile Cys Pro Gly Tyr Arg Trp Met
      145                      150                      155                      160
Cys Leu Arg Arg Phe Ile Ile Phe Leu Phe Ile Leu Leu Leu Cys Leu
      165                      170                      175
Ile Phe Leu Leu Val Leu Leu Asp Tyr Gln Gly Met Leu Pro Val Cys
      180                      185                      190
Pro Leu Leu Pro Gly Thr Ser Thr Thr Ser Thr Gly Pro Cys Lys Thr
      195                      200                      205
Cys Thr Ile Pro Ala Gln Gly Thr Ser Met Phe Pro Ser Cys Cys Cys
      210                      215                      220
Thr Lys Pro Ser Asp Arg Asn Cys Thr Cys Ile Pro Ile Pro Ser Ser
      225                      230                      235                      240
Trp Ala Phe Ala Arg Phe Leu Trp Glu Trp Ala Ser Val Arg Phe Ser
      245                      250                      255
Trp Leu Ser Leu Leu Val Pro Phe Val Gln Trp Phe Val Gly Leu Ser
      260                      265                      270
Pro Thr Val Trp Leu Ser Val Ile Trp Met Met Trp Tyr Trp Gly Pro
      275                      280                      285
Ser Leu Tyr Asn Ile Leu Ser Pro Phe Leu Pro Leu Leu Pro Ile Phe
      290                      295                      300
Phe Cys Leu Trp Val Tyr Ile
      305                      310

```

<210> 44

<211> 933

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 44

```

atggggacga atctttctgt tcccaatcct ctgggattct ttcccgatca ccagttggac 60
ggcgccgca tgaactctga ttccgaatgc ccgctgtctc atgacggtta ctgcctgcat 120
gatggcgat gcatgtacat cgaagctctg gacaaatag catgcaactg tgtttaggt 180
tacatcgcg aacgttgcca gtatcgcgac ctgaaatggg gggaactgcg taaggcggcc 240
gccctgcac cgaacatgga gaacacaaca tcaggattcc taggaccctt gctcgtgta 300
caggcgggt tttcttgtt gacaagaatc ctcaaatat cacagagtct agactcgtg 360
tggaatttc tcaattttct agggggagca cccacgtgtc ctggccaaaa ttcgcagtcc 420
ccaacctcca atcactcacc aacctcttgt cctccaattt gtcctggcta tcgctggatg 480
tgtctgccc gttttatcat attcctcttc atcctgctgc tatgcctcat cttcttggtg 540
gttcttctgg actaccaagg tatgttgccc gtttgcctc tacttccagg aacatcaacc 600
accagcacgg ggccatgcaa gacctgcacg attcctgtc gaggaacctc tatgtttccc 660

```

# Sequence Listing.txt

```
tcttgttgct gtacaaaacc ttcggacaga aactgcactt gtattcccat cccatcatcc 720
tgggcttttcg caagattcct atgggagtg gcctcagtcg gtttctcctg gctcagttta 780
ctagtgccat ttgttcagtg gticgtaggg ctttcccca ctgtttggct ttcagttata 840
tggatgatgt ggtattgggg gccaaagtctg tacaacatct tgagtcctt tttacctcta 900
ttaccaatit tcttttgtct ttgggtatac att 933
```

<210> 45

<211> 311

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 45

Met Gly Thr Asn Leu Ser Val Pro Asn Pro Leu Gly Phe Phe Pro Asp  
1 5 10 15

His Gln Leu Asp Gly Gly Arg Met Asn Ser Asp Ser Glu Cys Pro Leu  
20 25 30

Ser His Asp Gly Tyr Cys Leu His Asp Gly Val Cys Met Tyr Ile Glu  
35 40 45

Ala Leu Asp Lys Tyr Ala Cys Asn Cys Val Val Gly Tyr Ile Gly Glu  
50 55 60

Arg Cys Gln Tyr Arg Asp Leu Lys Trp Trp Glu Leu Arg Lys Ala Ala  
65 70 75 80

Ala Pro Ala Pro Asn Met Glu Asn Thr Thr Ser Gly Phe Leu Gly Pro  
85 90 95

Leu Leu Val Leu Gln Ala Gly Phe Phe Leu Leu Thr Arg Ile Leu Thr  
100 105 110

Ile Pro Gln Ser Leu Asp Ser Trp Trp Thr Ser Leu Asn Phe Leu Gly  
115 120 125

Gly Ala Pro Thr Cys Pro Gly Gln Asn Ser Gln Ser Pro Thr Ser Asn  
130 135 140

His Ser Pro Thr Ser Cys Pro Pro Ile Cys Pro Gly Tyr Arg Trp Met  
145 150 155 160

Cys Leu Arg Arg Phe Ile Ile Phe Leu Phe Ile Leu Leu Leu Cys Leu  
165 170 175

Ile Phe Leu Leu Val Leu Leu Asp Tyr Gln Gly Met Leu Pro Val Cys  
180 185 190

Pro Leu Leu Pro Gly Thr Ser Thr Thr Ser Thr Gly Pro Cys Lys Thr  
195 200 205

Cys Thr Ile Pro Ala Arg Gly Thr Ser Met Phe Pro Ser Cys Cys Cys  
210 215 220

Thr Lys Pro Ser Asp Arg Asn Cys Thr Cys Ile Pro Ile Pro Ser Ser  
225 230 235 240

Trp Ala Phe Ala Arg Phe Leu Trp Glu Trp Ala Ser Val Arg Phe Ser  
Page 20

## Sequence Listing.txt

245

250

255

Trp Leu Ser Leu Leu Val Pro Phe Val Gln Trp Phe Val Gly Leu Ser  
 260 265 270

Pro Thr Val Trp Leu Ser Val Ile Trp Met Met Trp Tyr Trp Gly Pro  
 275 280 285

Ser Leu Tyr Asn Ile Leu Ser Pro Phe Leu Pro Leu Leu Pro Ile Phe  
 290 295 300

Phe Cys Leu Trp Val Tyr Ile  
 305 310

&lt;210&gt; 46

&lt;211&gt; 792

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence:Artificially synthesized sequence

&lt;400&gt; 46

```

atggggacga atctttctgt tccaatcct ctgggattct ttcccgatca ccagttggac 60
ggcgccgct ggagccacc gcagttcgaa aaagcgccg cccctgcacc gaacatggag 120
aacacaacat caggattcct aggaccctg ctcgtgttac aggcggggtt tttcttggtg 180
acaagaatcc tcacaatacc acagagtcta gactcgtggt ggacttctct caattttcta 240
gggggagcac ccacgtgtcc tggccaaaat tcgcagtccc caacctcaa tcactcacca 300
acctctgtc ctccaattg tcctggctat cgctggatgt gtctgcggcg ttttatcata 360
ttcctcttca tcctgctgct atgcctcatc ttcttggttg ttcttctgga ctaccaaggt 420
atgttgcccg tttgtcctct acttccagga acatcaacca ccagcacggg gccatgcaag 480
acctgcacga ttctgtctca aggaacctct atgtttccct cttgttgctg tacaaaacct 540
tcggacggaa actgcacttg tattcccatc ccatcatcct gggctttcgc aagattccta 600
tgggagtggt cctcagtccg tttctcctgg ctcagtttac tagtgccatt tgttcagtg 660
ttcgtagggc tttcccccac tgtttggtt tcagttatat ggatgatgtg gtattggggg 720
ccaagtctgt acaacatctt gagtcccttt ttacctctat taccaatttt cttttgtctt 780
tggtatata tt 792

```

&lt;210&gt; 47

&lt;211&gt; 264

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence:Artificially synthesized sequence

&lt;400&gt; 47

Met Gly Thr Asn Leu Ser Val Pro Asn Pro Leu Gly Phe Phe Pro Asp  
 1 5 10 15

His Gln Leu Asp Gly Gly Arg Trp Ser His Pro Gln Phe Glu Lys Ala  
 20 25 30

Ala Ala Pro Ala Pro Asn Met Glu Asn Thr Thr Ser Gly Phe Leu Gly  
 35 40 45

Pro Leu Leu Val Leu Gln Ala Gly Phe Phe Leu Leu Thr Arg Ile Leu  
 50 55 60

## Sequence Listing.txt

Thr Ile Pro Gln Ser Leu Asp Ser Trp Trp Thr Ser Leu Asn Phe Leu  
 65 70 75 80  
 Gly Gly Ala Pro Thr Cys Pro Gly Gln Asn Ser Gln Ser Pro Thr Ser  
 85 90 95  
 Asn His Ser Pro Thr Ser Cys Pro Pro Ile Cys Pro Gly Tyr Arg Trp  
 100 105 110  
 Met Cys Leu Arg Arg Phe Ile Ile Phe Leu Phe Ile Leu Leu Leu Cys  
 115 120 125  
 Leu Ile Phe Leu Leu Val Leu Leu Asp Tyr Gln Gly Met Leu Pro Val  
 130 135 140  
 Cys Pro Leu Leu Pro Gly Thr Ser Thr Thr Ser Thr Gly Pro Cys Lys  
 145 150 155 160  
 Thr Cys Thr Ile Pro Ala Gln Gly Thr Ser Met Phe Pro Ser Cys Cys  
 165 170 175  
 Cys Thr Lys Pro Ser Asp Gly Asn Cys Thr Cys Ile Pro Ile Pro Ser  
 180 185 190  
 Ser Trp Ala Phe Ala Arg Phe Leu Trp Glu Trp Ala Ser Val Arg Phe  
 195 200 205  
 Ser Trp Leu Ser Leu Leu Val Pro Phe Val Gln Trp Phe Val Gly Leu  
 210 215 220  
 Ser Pro Thr Val Trp Leu Ser Val Ile Trp Met Met Trp Tyr Trp Gly  
 225 230 235 240  
 Pro Ser Leu Tyr Asn Ile Leu Ser Pro Phe Leu Pro Leu Leu Pro Ile  
 245 250 255  
 Phe Phe Cys Leu Trp Val Tyr Ile  
 260

&lt;210&gt; 48

&lt;211&gt; 792

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence:Artificially synthesized sequence

&lt;400&gt; 48

|            |             |            |            |            |            |     |
|------------|-------------|------------|------------|------------|------------|-----|
| atggggacga | atcttttctgt | tccaatcct  | ctgggattct | ttcccgatca | ccagttggac | 60  |
| ggcgccgct  | ggagccaccc  | gcagttcgaa | aaagcggccg | cccctgcacc | gaacatggag | 120 |
| aacacaacat | caggattcct  | aggacccctg | ctcgtgttac | aggcgggggt | tttcttggtg | 180 |
| acaagaatcc | tcacaatacc  | acagagtcta | gactcgtggt | ggactttctt | caattttcta | 240 |
| gggggagcac | ccacgtgtcc  | tggccaaaat | tcgcagtccc | caacctccaa | tcactcacca | 300 |
| acctctgtc  | ctccaatttg  | tcctggctat | cgctggatgt | gtctgcggcg | ttttatcata | 360 |
| ttcctcttca | tcctgctgct  | atgcctcatc | ttcttggttg | ttcttctgga | ctaccaaggt | 420 |
| atgttgcccg | tttgtcctct  | acttccagga | acatcaacca | ccagcacggg | gccatgcaag | 480 |
| acctgcacga | ttcctgctcg  | aggaaacctt | atgtttccct | cttgttgctg | tacaaaacct | 540 |
| tcggacggaa | actgcacttg  | tattcccatc | ccatcatcct | gggctttcgc | aagattccta | 600 |
| tgggagtggg | cctcagtcctg | tttctcctgg | ctcagtttac | tagtgccatt | tggttcagtg | 660 |
| ttcgtagggc | tttcccccac  | tgtttggttt | tcagttatat | ggatgatgtg | gtattg999g | 720 |
| ccaagtctgt | acaacatctt  | gagtcctttt | ttacctctat | taccaatttt | cttttgcttt | 780 |

tggtatataca tt

<210> 49

<211> 264

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially  
synthesized sequence

<400> 49

```

Met Gly Thr Asn Leu Ser Val Pro Asn Pro Leu Gly Phe Phe Pro Asp
 1           5           10           15
His Gln Leu Asp Gly Gly Arg Trp Ser His Pro Gln Phe Glu Lys Ala
          20           25           30
Ala Ala Pro Ala Pro Asn Met Glu Asn Thr Thr Ser Gly Phe Leu Gly
          35           40           45
Pro Leu Leu Val Leu Gln Ala Gly Phe Phe Leu Leu Thr Arg Ile Leu
          50           55           60
Thr Ile Pro Gln Ser Leu Asp Ser Trp Trp Thr Ser Leu Asn Phe Leu
          65           70           75           80
Gly Gly Ala Pro Thr Cys Pro Gly Gln Asn Ser Gln Ser Pro Thr Ser
          85           90           95
Asn His Ser Pro Thr Ser Cys Pro Pro Ile Cys Pro Gly Tyr Arg Trp
          100          105          110
Met Cys Leu Arg Arg Phe Ile Ile Phe Leu Phe Ile Leu Leu Leu Cys
          115          120          125
Leu Ile Phe Leu Leu Val Leu Leu Asp Tyr Gln Gly Met Leu Pro Val
          130          135          140
Cys Pro Leu Leu Pro Gly Thr Ser Thr Thr Ser Thr Gly Pro Cys Lys
          145          150          155          160
Thr Cys Thr Ile Pro Ala Arg Gly Thr Ser Met Phe Pro Ser Cys Cys
          165          170          175
Cys Thr Lys Pro Ser Asp Gly Asn Cys Thr Cys Ile Pro Ile Pro Ser
          180          185          190
Ser Trp Ala Phe Ala Arg Phe Leu Trp Glu Trp Ala Ser Val Arg Phe
          195          200          205
Ser Trp Leu Ser Leu Leu Val Pro Phe Val Gln Trp Phe Val Gly Leu
          210          215          220
Ser Pro Thr Val Trp Leu Ser Val Ile Trp Met Met Trp Tyr Trp Gly
          225          230          235          240
Pro Ser Leu Tyr Asn Ile Leu Ser Pro Phe Leu Pro Leu Leu Pro Ile
          245          250          255
Phe Phe Cys Leu Trp Val Tyr Ile
          260

```

# Sequence Listing.txt

<210> 50  
 <211> 792  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence:Artificially  
 synthesized sequence

<400> 50  
 atggggacga atctttctgt tcccaatcct ctgggattct ttcccgatca ccagttggac 60  
 ggcggccgct ggagccaccc gcagttcgaa aaagcggccg cccctgcacc gaacatggag 120  
 aacacaacat caggattcct aggacccctg ctctgtttac aggcgggggt tttcttgttg 180  
 acaagaatcc tcacaatacc acagagtcta gactcgtggg ggacttctct caattttcta 240  
 ggggggagcac ccacgtgtcc tggccaaaat tcgcagtccc caacctccaa tcactcacca 300  
 acctcttgtc ctccaatttg tcctggctat cgctggatgt gtctgcggcg ttttatcata 360  
 ttcctcttca tcctgctgct atgcctcatc ttcttcttgg ttcttctgga ctaccaaggt 420  
 atgttgcccg tttgtcctct acttccagga acatcaacca ccagcacggg gccatgcaag 480  
 acctgcacga ttcctgctca aggaacctct atgtttccct cttgttgctg tacaaaacct 540  
 tcggacagaa actgcacttg tattcccatc ccatcatcct gggctttcgc aagattccta 600  
 tgggagtggg cctcagtcctg tttctcctgg ctacagttac tagtgccatt tgttcagtg 660  
 ttcgtagggc tttccccccac tgtttggtt tcagttatat ggatgatgtg gtattggggg 720  
 ccaagtctgt acaacatctt gagtcccttt ttacctctat taccaatttt cttttgtctt 780  
 tgggtatata tt 792

<210> 51  
 <211> 264  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence:Artificially  
 synthesized sequence

<400> 51  
 Met Gly Thr Asn Leu Ser Val Pro Asn Pro Leu Gly Phe Phe Pro Asp  
 1 5 10 15  
 His Gln Leu Asp Gly Gly Arg Trp Ser His Pro Gln Phe Glu Lys Ala  
 20 25 30  
 Ala Ala Pro Ala Pro Asn Met Glu Asn Thr Thr Ser Gly Phe Leu Gly  
 35 40 45  
 Pro Leu Leu Val Leu Gln Ala Gly Phe Phe Leu Leu Thr Arg Ile Leu  
 50 55 60  
 Thr Ile Pro Gln Ser Leu Asp Ser Trp Trp Thr Ser Leu Asn Phe Leu  
 65 70 75 80  
 Gly Gly Ala Pro Thr Cys Pro Gly Gln Asn Ser Gln Ser Pro Thr Ser  
 85 90 95  
 Asn His Ser Pro Thr Ser Cys Pro Pro Ile Cys Pro Gly Tyr Arg Trp  
 100 105 110  
 Met Cys Leu Arg Arg Phe Ile Ile Phe Leu Phe Ile Leu Leu Leu Cys  
 115 120 125  
 Leu Ile Phe Leu Leu Val Leu Leu Asp Tyr Gln Gly Met Leu Pro Val



## Sequence Listing.txt

130

135

140

Cys Pro Leu Leu Pro Gly Thr Ser Thr Thr Ser Thr Gly Pro Cys Lys  
 145 150 155 160  
 Thr Cys Thr Ile Pro Ala Gln Gly Thr Ser Met Phe Pro Ser Cys Cys  
 165 170 175  
 Cys Thr Lys Pro Ser Asp Arg Asn Cys Thr Cys Ile Pro Ile Pro Ser  
 180 185 190  
 Ser Trp Ala Phe Ala Arg Phe Leu Trp Glu Trp Ala Ser Val Arg Phe  
 195 200 205  
 Ser Trp Leu Ser Leu Leu Val Pro Phe Val Gln Trp Phe Val Gly Leu  
 210 215 220  
 Ser Pro Thr Val Trp Leu Ser Val Ile Trp Met Met Trp Tyr Trp Gly  
 225 230 235 240  
 Pro Ser Leu Tyr Asn Ile Leu Ser Pro Phe Leu Pro Leu Leu Pro Ile  
 245 250 255  
 Phe Phe Cys Leu Trp Val Tyr Ile  
 260

&lt;210&gt; 52

&lt;211&gt; 792

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence:Artificially synthesized sequence

&lt;400&gt; 52

|            |             |            |            |            |            |     |
|------------|-------------|------------|------------|------------|------------|-----|
| atggggacga | atcttttctgt | tcccaatcct | ctgggattct | ttcccgatca | ccagttggac | 60  |
| ggcgggcgct | ggagccaccc  | gcagttcgaa | aaagcggccg | cccctgcacc | gaacatggag | 120 |
| aacacaacat | caggattcct  | aggacccctg | ctcgtgttac | aggcgggggt | tttcttggtg | 180 |
| acaagaatcc | tcacaatacc  | acagagtcta | gactcgtggg | ggacttctct | caattttcta | 240 |
| gggggagcac | ccacgtgtcc  | tggccaaaat | tcgcagtccc | caacctccaa | tcactcacca | 300 |
| acctcttgct | ctccaatttg  | tcctggctat | cgctggatgt | gtctgcggcg | ttttatcata | 360 |
| ttcctcttca | tcctgctgct  | atgcctcatc | ttcttggttg | ttcttctgga | ctaccaaggt | 420 |
| atgttgcccc | tttgtcctct  | acttccagga | acatcaacca | ccagcacggg | gccatgcaag | 480 |
| acctgcacga | ttcctgctcg  | aggaacctct | atgtttccct | cttgttgctg | tacaaaacct | 540 |
| tcggacagaa | actgcacttg  | tattcccatc | ccatcatcct | gggctttcgc | aagattccta | 600 |
| tgggagtggg | cctcagtcct  | tttctcctgg | ctcagtttac | tagtgccatt | tgttcagtg  | 660 |
| ttcgtagggc | tttccccccac | tgtttggtct | tcagttatat | ggatgatgtg | gtattggggg | 720 |
| ccaagtctgt | acaacatctt  | gagtcacctt | ttacctctat | taccaatttt | cttttgtctt | 780 |
| tgggtataca | tt          |            |            |            |            | 792 |

&lt;210&gt; 53

&lt;211&gt; 264

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence:Artificially synthesized sequence

&lt;400&gt; 53

Sequence Listing.txt

Met Gly Thr Asn Leu Ser Val Pro Asn Pro Leu Gly Phe Phe Pro Asp  
1 5 10 15  
His Gln Leu Asp Gly Gly Arg Trp Ser His Pro Gln Phe Glu Lys Ala  
20 25 30  
Ala Ala Pro Ala Pro Asn Met Glu Asn Thr Thr Ser Gly Phe Leu Gly  
35 40 45  
Pro Leu Leu Val Leu Gln Ala Gly Phe Phe Leu Leu Thr Arg Ile Leu  
50 55 60  
Thr Ile Pro Gln Ser Leu Asp Ser Trp Trp Thr Ser Leu Asn Phe Leu  
65 70 75 80  
Gly Gly Ala Pro Thr Cys Pro Gly Gln Asn Ser Gln Ser Pro Thr Ser  
85 90 95  
Asn His Ser Pro Thr Ser Cys Pro Pro Ile Cys Pro Gly Tyr Arg Trp  
100 105 110  
Met Cys Leu Arg Arg Phe Ile Ile Phe Leu Phe Ile Leu Leu Leu Cys  
115 120 125  
Leu Ile Phe Leu Leu Val Leu Leu Asp Tyr Gln Gly Met Leu Pro Val  
130 135 140  
Cys Pro Leu Leu Pro Gly Thr Ser Thr Thr Ser Thr Gly Pro Cys Lys  
145 150 155 160  
Thr Cys Thr Ile Pro Ala Arg Gly Thr Ser Met Phe Pro Ser Cys Cys  
165 170 175  
Cys Thr Lys Pro Ser Asp Arg Asn Cys Thr Cys Ile Pro Ile Pro Ser  
180 185 190  
Ser Trp Ala Phe Ala Arg Phe Leu Trp Glu Trp Ala Ser Val Arg Phe  
195 200 205  
Ser Trp Leu Ser Leu Leu Val Pro Phe Val Gln Trp Phe Val Gly Leu  
210 215 220  
Ser Pro Thr Val Trp Leu Ser Val Ile Trp Met Met Trp Tyr Trp Gly  
225 230 235 240  
Pro Ser Leu Tyr Asn Ile Leu Ser Pro Phe Leu Pro Leu Leu Pro Ile  
245 250 255  
Phe Phe Cys Leu Trp Val Tyr Ile  
260

<210> 54

<211> 1170

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially  
synthesized sequence

<400> 54

atggggacga atctttctgt tcccaatcct ctgggattct ttcccgatca ccagttggac 60

# Sequence Listing.txt

```

cctgcgttcg gagccaactc aaacaatcca gattggggcg gccgcgcgca acacgatgaa 120
gccgtagaca acaaattcaa caaagaacaa caaaacgcgt tctatgagat cttacattta 180
cctaacttaa acgaagaaca acgaaacgcc ttcattccaaa gtttaaaaga tgaccaagc 240
caaagcgcta accttttagc agaagctaaa aagctaaatg atgctcaggc gccgaaagta 300
gacaacaaat tcaacaaaga acaacaaaac gcgttctatg agatcttaca ttacctaac 360
ttaaacgaag aacaacgaaa cgccttcac caaagttaa aagatgacc aagccaaagc 420
gctaaccctt tagcagaagc taaaaagcta aatgatgctc aggcgccgaa agcgccgcc 480
cctgcaccga acatggagaa cacaacatca ggattcctag gaccctgct cgtgttacag 540
gcgggggttt tcttggtgac aagaatcctc acaataccac agagtctaga ctcgtggtg 600
acttctctca attttctagg gggagcacc acgtgtcctg gccaaaattc gcagtcccca 660
acctccaatc actcaccaac ctcttgctc ccaatttgc ctggctatcg ctggatgtgt 720
ctgcggcgtt ttatcatatt cctcttcac ctgctgctat gcctcatctt cttgttggtt 780
cttctggact accaaggtat gttgcccgtt tgcctctac ttccaggaac atcaaccacc 840
agcacggggc catgcaagac ctgcacgatt cctgctcaag gaacctctat gtttccctct 900
tggtgtgta caaaccttc ggacggaaac tgcacttgta ttcccatccc atcatcctg 960
gctttcgcaa gattcctatg ggagtgggcc tcagtccgtt tctcctggct cagtttacta 1020
gtgccatttg ttcagtgggt cgtagggtt tccccactg tttggctttc agttatatg 1080
atgatgtggt attgggggcc aagtctgtac aacatcttga gtccctttt acctctatta 1140
ccaattttct tttgtctttt ggtatacatt 1170

```

<210> 55

<211> 390

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 55

Met Gly Thr Asn Leu Ser Val Pro Asn Pro Leu Gly Phe Phe Pro Asp  
1 5 10 15

His Gln Leu Asp Pro Ala Phe Gly Ala Asn Ser Asn Asn Pro Asp Trp  
20 25 30

Gly Gly Arg Ala Gln His Asp Glu Ala Val Asp Asn Lys Phe Asn Lys  
35 40 45

Glu Gln Gln Asn Ala Phe Tyr Glu Ile Leu His Leu Pro Asn Leu Asn  
50 55 60

Glu Glu Gln Arg Asn Ala Phe Ile Gln Ser Leu Lys Asp Asp Pro Ser  
65 70 75 80

Gln Ser Ala Asn Leu Leu Ala Glu Ala Lys Lys Leu Asn Asp Ala Gln  
85 90 95

Ala Pro Lys Val Asp Asn Lys Phe Asn Lys Glu Gln Gln Asn Ala Phe  
100 105 110

Tyr Glu Ile Leu His Leu Pro Asn Leu Asn Glu Glu Gln Arg Asn Ala  
115 120 125

Phe Ile Gln Ser Leu Lys Asp Asp Pro Ser Gln Ser Ala Asn Leu Leu  
130 135 140

Ala Glu Ala Lys Lys Leu Asn Asp Ala Gln Ala Pro Lys Ala Ala Ala  
145 150 155 160

Pro Ala Pro Asn Met Glu Asn Thr Thr Ser Gly Phe Leu Gly Pro Leu  
165 170 175

# Sequence Listing.txt

Leu Val Leu Gln Ala Gly Phe Phe Leu Leu Thr Arg Ile Leu Thr Ile  
 180 185 190  
 Pro Gln Ser Leu Asp Ser Trp Trp Thr Ser Leu Asn Phe Leu Gly Gly  
 195 200 205  
 Ala Pro Thr Cys Pro Gly Gln Asn Ser Gln Ser Pro Thr Ser Asn His  
 210 215 220  
 Ser Pro Thr Ser Cys Pro Pro Ile Cys Pro Gly Tyr Arg Trp Met Cys  
 225 230 235 240  
 Leu Arg Arg Phe Ile Ile Phe Leu Phe Ile Leu Leu Leu Cys Leu Ile  
 245 250 255  
 Phe Leu Leu Val Leu Leu Asp Tyr Gln Gly Met Leu Pro Val Cys Pro  
 260 265 270  
 Leu Leu Pro Gly Thr Ser Thr Thr Ser Thr Gly Pro Cys Lys Thr Cys  
 275 280 285  
 Thr Ile Pro Ala Gln Gly Thr Ser Met Phe Pro Ser Cys Cys Cys Thr  
 290 295 300  
 Lys Pro Ser Asp Gly Asn Cys Thr Cys Ile Pro Ile Pro Ser Ser Trp  
 305 310 315 320  
 Ala Phe Ala Arg Phe Leu Trp Glu Trp Ala Ser Val Arg Phe Ser Trp  
 325 330 335  
 Leu Ser Leu Leu Val Pro Phe Val Gln Trp Phe Val Gly Leu Ser Pro  
 340 345 350  
 Thr Val Trp Leu Ser Val Ile Trp Met Met Trp Tyr Trp Gly Pro Ser  
 355 360 365  
 Leu Tyr Asn Ile Leu Ser Pro Phe Leu Pro Leu Leu Pro Ile Phe Phe  
 370 375 380  
 Cys Leu Trp Val Tyr Ile  
 385 390

<210> 56

<211> 1170

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 56

|             |             |            |            |            |            |     |
|-------------|-------------|------------|------------|------------|------------|-----|
| atgggggacga | atcttttctgt | tccaatcct  | ctgggattct | ttcccgatca | ccagttggac | 60  |
| cctgcgttcg  | gagccaactc  | aaacaatcca | gattggggcg | gccgcgcgca | acacgatgaa | 120 |
| gccgtagaca  | acaaattcaa  | caaagaacaa | caaaacgcgt | tctatgagat | cttacattta | 180 |
| cctaacttaa  | acgaagaaca  | acgaaacgcc | ttcatccaaa | gtttaaaaga | tgacccaagc | 240 |
| caaagcgcta  | accttttagc  | agaagctaaa | aagctaaatg | atgctcaggc | gccgaaagta | 300 |
| gacaacaaat  | tcaacaaaga  | acaacaaaac | gcgttctatg | agatcttaca | tttacctaac | 360 |
| ttaaacgaag  | aacaacgaaa  | cgcttcatc  | caaagttaa  | aagatgaccc | aagccaaagc | 420 |
| gctaaccctt  | tagcagaagc  | taaaaagcta | aatgatgctc | aggcgccgaa | agcggccgcc | 480 |
| cctgcaccga  | acatggagaa  | cacaacatca | ggattcctag | gacccttgct | cgtgttacag | 540 |

## Sequence Listing.txt

```

gcgggggtttt tcttgttgac aagaatcctc acaataaccac agagtctaga ctcgtggtgg 600
acttctctca attttctagg gggagcaccc acgtgtcctg gccaaaattc gcagtcccca 660
acctccaatc actcaccaac ctcttgcctt ccaatttgtc ctggctatcg ctggatgtgt 720
ctgcggcggtt ttatcatatt cctcttcac cctgctgctat gcctcatctt cttgttggtt 780
cttctggact accaagggtat gttgcccggtt tgtcctctac ttccaggaac atcaaccacc 840
agcacggggc catgcaagac ctgcacgatt cctgctcgag gaacctctat gtttccctct 900
tggttctgta caaaaccttc ggacggaaac tgcacttgta ttcccatccc atcatcctgg 960
gctttcgcaa gattcctatg ggagtgggct tcagtcctgt tctcctggct cagtttacta 1020
gtgccatttg ttccagtgggt cgtagggtt tccccactg tttggctttc agttatatgg 1080
atgatgtggt attgggggcc aagtctgtac aacatcttga gtcccttttt acctctatta 1140
ccaattttct ttgtctttt ggtatacatt 1170

```

&lt;210&gt; 57

&lt;211&gt; 390

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence:Artificially synthesized sequence

&lt;400&gt; 57

```

Met Gly Thr Asn Leu Ser Val Pro Asn Pro Leu Gly Phe Phe Pro Asp
 1           5           10           15

```

```

His Gln Leu Asp Pro Ala Phe Gly Ala Asn Ser Asn Asn Pro Asp Trp
           20           25           30

```

```

Gly Gly Arg Ala Gln His Asp Glu Ala Val Asp Asn Lys Phe Asn Lys
 35           40           45

```

```

Glu Gln Gln Asn Ala Phe Tyr Glu Ile Leu His Leu Pro Asn Leu Asn
 50           55           60

```

```

Glu Glu Gln Arg Asn Ala Phe Ile Gln Ser Leu Lys Asp Asp Pro Ser
 65           70           75           80

```

```

Gln Ser Ala Asn Leu Leu Ala Glu Ala Lys Lys Leu Asn Asp Ala Gln
 85           90           95

```

```

Ala Pro Lys Val Asp Asn Lys Phe Asn Lys Glu Gln Gln Asn Ala Phe
100           105           110

```

```

Tyr Glu Ile Leu His Leu Pro Asn Leu Asn Glu Glu Gln Arg Asn Ala
115           120           125

```

```

Phe Ile Gln Ser Leu Lys Asp Asp Pro Ser Gln Ser Ala Asn Leu Leu
130           135           140

```

```

Ala Glu Ala Lys Lys Leu Asn Asp Ala Gln Ala Pro Lys Ala Ala Ala
145           150           155           160

```

```

Pro Ala Pro Asn Met Glu Asn Thr Thr Ser Gly Phe Leu Gly Pro Leu
165           170           175

```

```

Leu Val Leu Gln Ala Gly Phe Phe Leu Leu Thr Arg Ile Leu Thr Ile
180           185           190

```

```

Pro Gln Ser Leu Asp Ser Trp Trp Thr Ser Leu Asn Phe Leu Gly Gly
195           200           205

```

Ala Pro Thr Cys Pro Gly Gln Asn Ser Gln Ser Pro Thr Ser Asn His

## Sequence Listing.txt

210

215

220

```

Ser Pro Thr Ser Cys Pro Pro Ile Cys Pro Gly Tyr Arg Trp Met Cys
225                230                235                240

Leu Arg Arg Phe Ile Ile Phe Leu Phe Ile Leu Leu Leu Cys Leu Ile
                245                250                255

Phe Leu Leu Val Leu Leu Asp Tyr Gln Gly Met Leu Pro Val Cys Pro
                260                265                270

Leu Leu Pro Gly Thr Ser Thr Thr Ser Thr Gly Pro Cys Lys Thr Cys
                275                280                285

Thr Ile Pro Ala Arg Gly Thr Ser Met Phe Pro Ser Cys Cys Cys Thr
                290                295                300

Lys Pro Ser Asp Gly Asn Cys Thr Cys Ile Pro Ile Pro Ser Ser Trp
305                310                315                320

Ala Phe Ala Arg Phe Leu Trp Glu Trp Ala Ser Val Arg Phe Ser Trp
                325                330                335

Leu Ser Leu Leu Val Pro Phe Val Gln Trp Phe Val Gly Leu Ser Pro
                340                345                350

Thr Val Trp Leu Ser Val Ile Trp Met Met Trp Tyr Trp Gly Pro Ser
                355                360                365

Leu Tyr Asn Ile Leu Ser Pro Phe Leu Pro Leu Leu Pro Ile Phe Phe
                370                375                380

Cys Leu Trp Val Tyr Ile
385                390

```

&lt;210&gt; 58

&lt;211&gt; 1170

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence:Artificially synthesized sequence

&lt;400&gt; 58

```

atgggggacga atcttttctgt tcccaatcct ctgggattct ttcccgatca ccagttggac 60
cctgcgttcg gagccaactc aaacaatcca gattggggcg gccgcgcgca acacgatgaa 120
gccgtagaca acaaattcaa caaagaacaa caaaacgcgt tctatgagat cttacattta 180
cctaacttaa acgaagaaca acgaaacgcc ttcatccaaa gtttaaaaga tgaccaagc 240
caaagcgcta accttttagc agaagctaaa aagctaaatg atgctcaggc gccgaaagta 300
gacaacaaat tcaacaaaga acaacaaaac gcgttctatg agatcttaca ttacctaac 360
ttaaacgaag aacaacgaaa cgccttcatc caaagttaa aagatgacct aagccaaagc 420
gctaaccttt tagcagaagc taaaaagcta aatgatgctc aggcgcgcaa agcggccgcc 480
cctgcaccga acatggagaa cacaacatca ggattcctag gaccctgct cgtgttacag 540
gcgggggttt tcttggtgac aagaatcctc acaataccac agagtctaga ctcgtggtg 600
acttctctca attttctagg gggagcacc acgtgtcctg gccaaaattc gcagtcccca 660
acctccaatc actcaccaac ctcttgctct ccaatttgct ctggctatcg ctggatgtgt 720
ctgcggcggt ttatcatatt cctcttcatc ctgctgctat gcctcatctt cttgttggtt 780
cttctggact accaaggtat gttgcccgtt tgtcctctac ttccaggaa atcaaccacc 840
agcacggggc catgaagac ctgcacgatt cctgctcaag gaacctctat gtttccctct 900
tgttgctgta caaaccttc ggacagaaac tgcacttgta ttcccatccc atcatcctgg 960
gctttcgcaa gattcctatg ggagtgggac tcagtccgtt tctcctggct cagtttacta 1020

```

Sequence Listing.txt

gtgccatttg ttcagtgggt cgtagggctt tccccactg ttggccttc agttatatgg 1080  
atgatgtggt attgggggcc aagtctgtac aacatcttga gtccctttt acctctatta 1140  
ccaattttct ttgtctttg ggtatacatt 1170

<210> 59

<211> 390

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially  
synthesized sequence

<400> 59

Met Gly Thr Asn Leu Ser Val Pro Asn Pro Leu Gly Phe Phe Pro Asp  
1 5 10 15  
His Gln Leu Asp Pro Ala Phe Gly Ala Asn Ser Asn Asn Pro Asp Trp  
20 25 30  
Gly Gly Arg Ala Gln His Asp Glu Ala Val Asp Asn Lys Phe Asn Lys  
35 40 45  
Glu Gln Gln Asn Ala Phe Tyr Glu Ile Leu His Leu Pro Asn Leu Asn  
50 55 60  
Glu Glu Gln Arg Asn Ala Phe Ile Gln Ser Leu Lys Asp Asp Pro Ser  
65 70 75 80  
Gln Ser Ala Asn Leu Leu Ala Glu Ala Lys Lys Leu Asn Asp Ala Gln  
85 90 95  
Ala Pro Lys Val Asp Asn Lys Phe Asn Lys Glu Gln Gln Asn Ala Phe  
100 105 110  
Tyr Glu Ile Leu His Leu Pro Asn Leu Asn Glu Glu Gln Arg Asn Ala  
115 120 125  
Phe Ile Gln Ser Leu Lys Asp Asp Pro Ser Gln Ser Ala Asn Leu Leu  
130 135 140  
Ala Glu Ala Lys Lys Leu Asn Asp Ala Gln Ala Pro Lys Ala Ala Ala  
145 150 155 160  
Pro Ala Pro Asn Met Glu Asn Thr Thr Ser Gly Phe Leu Gly Pro Leu  
165 170 175  
Leu Val Leu Gln Ala Gly Phe Phe Leu Leu Thr Arg Ile Leu Thr Ile  
180 185 190  
Pro Gln Ser Leu Asp Ser Trp Trp Thr Ser Leu Asn Phe Leu Gly Gly  
195 200 205  
Ala Pro Thr Cys Pro Gly Gln Asn Ser Gln Ser Pro Thr Ser Asn His  
210 215 220  
Ser Pro Thr Ser Cys Pro Pro Ile Cys Pro Gly Tyr Arg Trp Met Cys  
225 230 235 240  
Leu Arg Arg Phe Ile Ile Phe Leu Phe Ile Leu Leu Leu Cys Leu Ile  
245 250 255

## Sequence Listing.txt

Phe Leu Leu Val Leu Leu Asp Tyr Gln Gly Met Leu Pro Val Cys Pro  
 260 265 270  
 Leu Leu Pro Gly Thr Ser Thr Thr Ser Thr Gly Pro Cys Lys Thr Cys  
 275 280 285  
 Thr Ile Pro Ala Gln Gly Thr Ser Met Phe Pro Ser Cys Cys Cys Thr  
 290 295 300  
 Lys Pro Ser Asp Arg Asn Cys Thr Cys Ile Pro Ile Pro Ser Ser Trp  
 305 310 315 320  
 Ala Phe Ala Arg Phe Leu Trp Glu Trp Ala Ser Val Arg Phe Ser Trp  
 325 330 335  
 Leu Ser Leu Leu Val Pro Phe Val Gln Trp Phe Val Gly Leu Ser Pro  
 340 345 350  
 Thr Val Trp Leu Ser Val Ile Trp Met Met Trp Tyr Trp Gly Pro Ser  
 355 360 365  
 Leu Tyr Asn Ile Leu Ser Pro Phe Leu Pro Leu Leu Pro Ile Phe Phe  
 370 375 380  
 Cys Leu Trp Val Tyr Ile  
 385 390

&lt;210&gt; 60

&lt;211&gt; 1170

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence:Artificially synthesized sequence

&lt;400&gt; 60

|             |             |            |            |            |            |      |
|-------------|-------------|------------|------------|------------|------------|------|
| atgggggacga | atcttttctgt | tccaatcct  | ctgggattct | ttcccgatca | ccagttggac | 60   |
| cctgcgttcg  | gagccaactc  | aaacaatcca | gattggggcg | gccgcgcgca | acacgatgaa | 120  |
| gccgtagaca  | acaaattcaa  | caaagaacaa | caaaacgcgt | tctatgagat | cttacattta | 180  |
| cctaacttaa  | acgaagaaca  | acgaaacgcc | ttcatccaaa | gtttaaaaga | tgaccaagc  | 240  |
| caaagcgcta  | accttttagc  | agaagctaaa | aagctaaatg | atgctcaggc | gccgaaagta | 300  |
| gacaacaaat  | tcaacaaaga  | acaacaaaac | gcgttctatg | agatcttaca | tttacctaac | 360  |
| ttaaacgaag  | aacaacgaaa  | cgcttcatc  | caaagtttaa | aagatgacct | aagccaaagc | 420  |
| gctaaccctt  | tagcagaagc  | taaaaagcta | aatgatgctc | aggcgccgaa | agcggccgcc | 480  |
| cctgcaccga  | acatggagaa  | cacaacatca | ggattcctag | gacccctgct | cgtgttacag | 540  |
| gcgggggttt  | tcttgttgac  | aagaatcctc | acaataccac | agagtctaga | ctcgtggtgg | 600  |
| acttctctca  | attttctagg  | gggagcacc  | acgtgtcctg | gccaaaattc | gcagtcacca | 660  |
| acctccaatc  | actcaccaac  | ctcttgctct | ccaatttgct | ctggctatcg | ctggatgtgt | 720  |
| ctgcggcggt  | ttatcatatt  | cctcttcac  | ctgctgctat | gcctcatctt | cttggttggt | 780  |
| cttctggact  | accaaggtat  | gttgcccgtt | tgtcctctac | ttccaggaac | atcaaccacc | 840  |
| agcacggggc  | catgcaagac  | ctgcacgatt | cctgctcgag | gaacctctat | gtttccctct | 900  |
| tgttgctgta  | caaaaccttc  | ggacagaaac | tgcacttgta | ttcccatccc | atcatcctgg | 960  |
| gctttcgcaa  | gattcctatg  | ggagtgggcc | tcagtcggtt | tctcctggct | cagtttacta | 1020 |
| gtgccatttg  | ttcagtggtt  | cgtagggctt | tccccactg  | tttggttttc | agttatatgg | 1080 |
| atgatgtggt  | attggggggc  | aagtctgtac | aacatcttga | gtcccttttt | acctctatta | 1140 |
| ccaattttct  | tttgctttg   | ggtatacatt |            |            |            | 1170 |

&lt;210&gt; 61

&lt;211&gt; 390

&lt;212&gt; PRT



Sequence Listing.txt

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 61

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Met Gly Thr Asn Leu Ser Val Pro Asn Pro Leu Gly Phe Phe Pro Asp
 1           5           10           15
His Gln Leu Asp Pro Ala Phe Gly Ala Asn Ser Asn Asn Pro Asp Trp
           20           25           30
Gly Gly Arg Ala Gln His Asp Glu Ala Val Asp Asn Lys Phe Asn Lys
           35           40           45
Glu Gln Gln Asn Ala Phe Tyr Glu Ile Leu His Leu Pro Asn Leu Asn
           50           55           60
Glu Glu Gln Arg Asn Ala Phe Ile Gln Ser Leu Lys Asp Asp Pro Ser
           65           70           75           80
Gln Ser Ala Asn Leu Leu Ala Glu Ala Lys Lys Leu Asn Asp Ala Gln
           85           90           95
Ala Pro Lys Val Asp Asn Lys Phe Asn Lys Glu Gln Gln Asn Ala Phe
           100          105          110
Tyr Glu Ile Leu His Leu Pro Asn Leu Asn Glu Glu Gln Arg Asn Ala
           115          120          125
Phe Ile Gln Ser Leu Lys Asp Asp Pro Ser Gln Ser Ala Asn Leu Leu
           130          135          140
Ala Glu Ala Lys Lys Leu Asn Asp Ala Gln Ala Pro Lys Ala Ala Ala
           145          150          155          160
Pro Ala Pro Asn Met Glu Asn Thr Thr Ser Gly Phe Leu Gly Pro Leu
           165          170          175
Leu Val Leu Gln Ala Gly Phe Phe Leu Leu Thr Arg Ile Leu Thr Ile
           180          185          190
Pro Gln Ser Leu Asp Ser Trp Trp Thr Ser Leu Asn Phe Leu Gly Gly
           195          200          205
Ala Pro Thr Cys Pro Gly Gln Asn Ser Gln Ser Pro Thr Ser Asn His
           210          215          220
Ser Pro Thr Ser Cys Pro Pro Ile Cys Pro Gly Tyr Arg Trp Met Cys
           225          230          235          240
Leu Arg Arg Phe Ile Ile Phe Leu Phe Ile Leu Leu Leu Cys Leu Ile
           245          250          255
Phe Leu Leu Val Leu Leu Asp Tyr Gln Gly Met Leu Pro Val Cys Pro
           260          265          270
Leu Leu Pro Gly Thr Ser Thr Thr Ser Thr Gly Pro Cys Lys Thr Cys
           275          280          285
Thr Ile Pro Ala Arg Gly Thr Ser Met Phe Pro Ser Cys Cys Cys Thr
           290          295          300

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# Sequence Listing.txt

Lys Pro Ser Asp Arg Asn Cys Thr Cys Ile Pro Ile Pro Ser Ser Trp  
 305 310 315 320  
 Ala Phe Ala Arg Phe Leu Trp Glu Trp Ala Ser Val Arg Phe Ser Trp  
 325 330 335  
 Leu Ser Leu Leu Val Pro Phe Val Gln Trp Phe Val Gly Leu Ser Pro  
 340 345 350  
 Thr Val Trp Leu Ser Val Ile Trp Met Met Trp Tyr Trp Gly Pro Ser  
 355 360 365  
 Leu Tyr Asn Ile Leu Ser Pro Phe Leu Pro Leu Leu Pro Ile Phe Phe  
 370 375 380  
 Cys Leu Trp Val Tyr Ile  
 385 390

<210> 62  
 <211> 969  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence:Artificially  
 synthesized sequence

<400> 62  
 atggggacga atctttctgt tccaatcct ctgggattct ttcccgatca ccagttggac 60  
 cctgcgttcg gagccaactc aaacaatcca gattggggcg gccgcatgaa ctctgattcc 120  
 gaatgcccgc tgtctcatga cggttactgc ctgcatgatg gcgtatgcat gtacatcgaa 180  
 gctctggaca aatacgcatt caactgtgtt gtaggttaca tcggcgaacg ttgccagtat 240  
 cgcgacctga aatgggtggga actgcgtaag gcggccgccc ctgcaccgaa catggagaac 300  
 acaacatcag gattcctagg acccctgctc gtgttacagg cgggggtttt cttgttgaca 360  
 agaatcctca caataccaca gagtctagac tcgtgggtga cttctctcaa ttttctaggg 420  
 ggagcaccga cgtgtcctgg ccaaaattcg cagtcccca cctccaatca ctaccaacc 480  
 tcttgtcctc caatttgtcc tggctatcgc tggatgtgtc tgcggcggtt tatcatattc 540  
 ctcttcattc tgctgctatg cctcatcttc ttgttggttc ttctggacta ccaaggtatg 600  
 ttgcccgttt gtcctctact tccaggaaca tcaaccacca gcacggggcc atgcaagacc 660  
 tgcacgattc ctgctcaagg aacctctatg tttccctctt gttgctgtac aaaaccttcg 720  
 gacggaaact gcacttgat tcccatccca tcactctggg ctttcgcaag attcctatgg 780  
 gagtgggcct cagtcggttt ctcttggttc agtttactag tgccatttgt tcagtgggtc 840  
 gtagggcctt ccccccactg ttggctttca gttatatgga tgatgtggta ttggggggcca 900  
 agtctgtaca acatcttgag tcccttttta cctctattac caattttctt ttgtctttgg 960  
 gtatacatt 969

<210> 63  
 <211> 323  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence:Artificially  
 synthesized sequence

<400> 63  
 Met Gly Thr Asn Leu Ser Val Pro Asn Pro Leu Gly Phe Phe Pro Asp  
 1 5 10 15

His Gln Leu Asp Pro Ala Phe Gly Ala Asn Ser Asn Asn Pro Asp Trp  
 Page 34

## Sequence Listing.txt

20

25

30

Gly Gly Arg Met Asn Ser Asp Ser Glu Cys Pro Leu Ser His Asp Gly  
           35                          40                          45  
 Tyr Cys Leu His Asp Gly Val Cys Met Tyr Ile Glu Ala Leu Asp Lys  
       50                          55                          60  
 Tyr Ala Cys Asn Cys Val Val Gly Tyr Ile Gly Glu Arg Cys Gln Tyr  
       65                          70                          75                          80  
 Arg Asp Leu Lys Trp Trp Glu Leu Arg Lys Ala Ala Ala Pro Ala Pro  
                           85                          90                          95  
 Asn Met Glu Asn Thr Thr Ser Gly Phe Leu Gly Pro Leu Leu Val Leu  
                          100                         105                         110  
 Gln Ala Gly Phe Phe Leu Leu Thr Arg Ile Leu Thr Ile Pro Gln Ser  
          115                         120                         125  
 Leu Asp Ser Trp Trp Thr Ser Leu Asn Phe Leu Gly Gly Ala Pro Thr  
      130                         135                         140  
 Cys Pro Gly Gln Asn Ser Gln Ser Pro Thr Ser Asn His Ser Pro Thr  
      145                         150                         155                         160  
 Ser Cys Pro Pro Ile Cys Pro Gly Tyr Arg Trp Met Cys Leu Arg Arg  
                          165                         170                         175  
 Phe Ile Ile Phe Leu Phe Ile Leu Leu Leu Cys Leu Ile Phe Leu Leu  
          180                         185                         190  
 Val Leu Leu Asp Tyr Gln Gly Met Leu Pro Val Cys Pro Leu Leu Pro  
      195                         200                         205  
 Gly Thr Ser Thr Thr Ser Thr Gly Pro Cys Lys Thr Cys Thr Ile Pro  
      210                         215                         220  
 Ala Gln Gly Thr Ser Met Phe Pro Ser Cys Cys Cys Thr Lys Pro Ser  
      225                         230                         235                         240  
 Asp Gly Asn Cys Thr Cys Ile Pro Ile Pro Ser Ser Trp Ala Phe Ala  
                          245                         250                         255  
 Arg Phe Leu Trp Glu Trp Ala Ser Val Arg Phe Ser Trp Leu Ser Leu  
          260                         265                         270  
 Leu Val Pro Phe Val Gln Trp Phe Val Gly Leu Ser Pro Thr Val Trp  
      275                         280                         285  
 Leu Ser Val Ile Trp Met Met Trp Tyr Trp Gly Pro Ser Leu Tyr Asn  
      290                         295                         300  
 Ile Leu Ser Pro Phe Leu Pro Leu Leu Pro Ile Phe Phe Cys Leu Trp  
      305                         310                         315                         320  
 Val Tyr Ile

<210> 64  
 <211> 969  
 <212> DNA

Sequence Listing.txt

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 64

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atggggacga atctttctgt tcccaatcct ctgggattct ttcccgatca ccagttggac 60
cctgcgttcg gagccaactc aaacaatcca gattggggcg gccgcatgaa ctctgattcc 120
gaatgcccgc tgtctcatga cggttactgc ctgcatgatg gcgtatgcat gtacatcgaa 180
gctctggaca aatacgcgat caactgtgtt gtaggttaca tcggcgaacg ttgccagtat 240
cgcgacctga aatggtggga actgcgtaag gcggccgccc ctgcaccgaa catggagAAC 300
acaacatcag gattcctagg acccctgctc gtgttacagg cggggttttt cttgttgaca 360
agaatcctca caataccaca gagtctagac tcgtggtgga cttctctcaa ttttctaggg 420
ggagcaccca cgtgtcctgg ccaaaattcg cagtcccca cctccaatca ctcaccaacc 480
tcttgccttc caatttgctc tggctatcgc tggatgtgtc tgcggcggtt tatcatattc 540
ctcttcaccc tgctgctatg cctcatcttc ttgttggttc ttctggacta ccaaggatatg 600
ttgcccggtt gtctcttact tccaggaaca tcaaccacca gcacggggcc atgcaagacc 660
tgcacgattc ctgctcgagg aacctctatg ttccctctt gttgctgtac aaaaccttcg 720
gacggaaact gcacttgat tcccatccca tcatcctggg ctttcgcaag attcctatgg 780
gagtgggcct cagtccgttt ctcttggtc agtttactag tgccatttgt tcagtggttc 840
gtagggtttt cccccactgt ttggctttca gttatatgga tgatgtggta ttgggggcca 900
agtctgtaca acatcttgag tcccttttta cctctattac caattttctt ttgtctttgg 960
gtatacatt
969

```

<210> 65

<211> 323

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 65

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Met Gly Thr Asn Leu Ser Val Pro Asn Pro Leu Gly Phe Phe Pro Asp
1          5          10          15
His Gln Leu Asp Pro Ala Phe Gly Ala Asn Ser Asn Asn Pro Asp Trp
20          25          30
Gly Gly Arg Met Asn Ser Asp Ser Glu Cys Pro Leu Ser His Asp Gly
35          40          45
Tyr Cys Leu His Asp Gly Val Cys Met Tyr Ile Glu Ala Leu Asp Lys
50          55          60
Tyr Ala Cys Asn Cys Val Val Gly Tyr Ile Gly Glu Arg Cys Gln Tyr
65          70          75          80
Arg Asp Leu Lys Trp Trp Glu Leu Arg Lys Ala Ala Ala Pro Ala Pro
85          90          95
Asn Met Glu Asn Thr Thr Ser Gly Phe Leu Gly Pro Leu Leu Val Leu
100         105         110
Gln Ala Gly Phe Phe Leu Leu Thr Arg Ile Leu Thr Ile Pro Gln Ser
115         120         125
Leu Asp Ser Trp Trp Thr Ser Leu Asn Phe Leu Gly Gly Ala Pro Thr
130         135         140

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# Sequence Listing.txt

Cys Pro Gly Gln Asn Ser Gln Ser Pro Thr Ser Asn His Ser Pro Thr  
 145 150 155 160  
 Ser Cys Pro Pro Ile Cys Pro Gly Tyr Arg Trp Met Cys Leu Arg Arg  
 165 170 175  
 Phe Ile Ile Phe Leu Phe Ile Leu Leu Leu Cys Leu Ile Phe Leu Leu  
 180 185 190  
 Val Leu Leu Asp Tyr Gln Gly Met Leu Pro Val Cys Pro Leu Leu Pro  
 195 200 205  
 Gly Thr Ser Thr Thr Ser Thr Gly Pro Cys Lys Thr Cys Thr Ile Pro  
 210 215 220  
 Ala Arg Gly Thr Ser Met Phe Pro Ser Cys Cys Cys Thr Lys Pro Ser  
 225 230 235 240  
 Asp Gly Asn Cys Thr Cys Ile Pro Ile Pro Ser Ser Trp Ala Phe Ala  
 245 250 255  
 Arg Phe Leu Trp Glu Trp Ala Ser Val Arg Phe Ser Trp Leu Ser Leu  
 260 265 270  
 Leu Val Pro Phe Val Gln Trp Phe Val Gly Leu Ser Pro Thr Val Trp  
 275 280 285  
 Leu Ser Val Ile Trp Met Met Trp Tyr Trp Gly Pro Ser Leu Tyr Asn  
 290 295 300  
 Ile Leu Ser Pro Phe Leu Pro Leu Leu Pro Ile Phe Phe Cys Leu Trp  
 305 310 315 320  
 Val Tyr Ile

<210> 66  
 <211> 969  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence:Artificially  
 synthesized sequence

<400> 66  
 atggggacga atctttctgt tcccaatcct ctgggattct ttcccgatca ccagttggac 60  
 cctgcgttcg gagccaactc aaacaatcca gattggggcg gccgcatgaa ctctgattcc 120  
 gaatgcccgc tgtctcatga cggttactgc ctgcatgatg gcgtatgcat gtacatcgaa 180  
 gctctggaca aatacgcgat caactgtgtt gtaggttaca tcggcgaacg ttgccagtat 240  
 cgcgacctga aatgggtggga actgcgtaag gcggccgccc ctgcaccgaa catggagaac 300  
 acaacatcag gattcctagg acccctgctc gtgttacagg cgggggtttt cttgttgaca 360  
 agaatcctca caataccaca gagtctagac tcgtggtgga cttctctcaa ttttctaggg 420  
 ggagcaccga cgtgtcctcg ccaaaattcg cagtcccca cctccaatca ctcaccaacc 480  
 tcttgtcctc caatttgtcc tggctatcgc tggatgtgtc tgcggcgttt tatcatattc 540  
 ctcttcattc tgctgctatg cctcatcttc ttgttggttc ttctggacta ccaaggtatg 600  
 ttgcccgttt gtcctctact tccaggaaca tcaaccacca gcacggggcc atgcaagacc 660  
 tgcacgattc ctgctcaagg aacctctatg tttccctctt gttgctgtac aaaaccttcg 720  
 gacagaaact gcacttgat tcccatccca tcatcctggg ctttcgcaag attcctatgg 780  
 gagtgggcct cagtcctgtt ctccctggtc agtttactag tgccatttgt tcagtgggtc 840  
 gtagggtttt cccccactgt ttggctttca gttatatgga tgatgtggta ttgggggcca 900  
 agtctgtaca acatcttgag tcccttttta cctctattac caattttctt ttgtctttgg 960

gtatacatt

&lt;210&gt; 67

&lt;211&gt; 323

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence:Artificially  
synthesized sequence

&lt;400&gt; 67

Met Gly Thr Asn Leu Ser Val Pro Asn Pro Leu Gly Phe Phe Pro Asp  
1 5 10 15His Gln Leu Asp Pro Ala Phe Gly Ala Asn Ser Asn Asn Pro Asp Trp  
20 25 30Gly Gly Arg Met Asn Ser Asp Ser Glu Cys Pro Leu Ser His Asp Gly  
35 40 45Tyr Cys Leu His Asp Gly Val Cys Met Tyr Ile Glu Ala Leu Asp Lys  
50 55 60Tyr Ala Cys Asn Cys Val Val Gly Tyr Ile Gly Glu Arg Cys Gln Tyr  
65 70 75 80Arg Asp Leu Lys Trp Trp Glu Leu Arg Lys Ala Ala Ala Pro Ala Pro  
85 90 95Asn Met Glu Asn Thr Thr Ser Gly Phe Leu Gly Pro Leu Leu Val Leu  
100 105 110Gln Ala Gly Phe Phe Leu Leu Thr Arg Ile Leu Thr Ile Pro Gln Ser  
115 120 125Leu Asp Ser Trp Trp Thr Ser Leu Asn Phe Leu Gly Gly Ala Pro Thr  
130 135 140Cys Pro Gly Gln Asn Ser Gln Ser Pro Thr Ser Asn His Ser Pro Thr  
145 150 155 160Ser Cys Pro Pro Ile Cys Pro Gly Tyr Arg Trp Met Cys Leu Arg Arg  
165 170 175Phe Ile Ile Phe Leu Phe Ile Leu Leu Leu Cys Leu Ile Phe Leu Leu  
180 185 190Val Leu Leu Asp Tyr Gln Gly Met Leu Pro Val Cys Pro Leu Leu Pro  
195 200 205Gly Thr Ser Thr Thr Ser Thr Gly Pro Cys Lys Thr Cys Thr Ile Pro  
210 215 220Ala Gln Gly Thr Ser Met Phe Pro Ser Cys Cys Cys Thr Lys Pro Ser  
225 230 235 240Asp Arg Asn Cys Thr Cys Ile Pro Ile Pro Ser Ser Trp Ala Phe Ala  
245 250 255Arg Phe Leu Trp Glu Trp Ala Ser Val Arg Phe Ser Trp Leu Ser Leu  
260 265 270

# Sequence Listing.txt

Leu Val Pro Phe Val Gln Trp Phe Val Gly Leu Ser Pro Thr Val Trp  
275 280 285  
Leu Ser Val Ile Trp Met Met Trp Tyr Trp Gly Pro Ser Leu Tyr Asn  
290 295 300  
Ile Leu Ser Pro Phe Leu Pro Leu Leu Pro Ile Phe Phe Cys Leu Trp  
305 310 315 320  
Val Tyr Ile

<210> 68  
<211> 969  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Artificially  
synthesized sequence

<400> 68  
atggggacga atctttctgt tcccaatcct ctgggattct ttcccgatca ccagttggac 60  
cctgcgttcg gagccaactc aaacaatcca gattggggcg gccgcatgaa ctctgattcc 120  
gaatgcccgc tgtctcatga cggttactgc ctgcatgatg gcgtatgcat gtacatcgaa 180  
gctctggaca aatacgcatt caactgtgtt gtaggttaca tcggcgaacg ttgccagtat 240  
cgcgacctga aatgggtggga actgcgtaag gcggccgccc ctgcaccgaa catggagaac 300  
acaacatcag gattcctagg acccctgctc gtgttacagg cgggggtttt cttgttgaca 360  
agaatcctca caataaccaca gagtctagac tcgtgggtgga cttctctcaa ttttctaggg 420  
ggagcaccga cgtgtccttg ccaaaattcg cagtcccca cctccaatca ctcaccaacc 480  
tcttgctctc caatttgtcc tggctatcgc tggatgtgtc tgcggcggtt tatcatattc 540  
ctcttcatcc tgctgctatg cctcatcttc ttgttggttc ttctggacta ccaaggtatg 600  
ttgcccggtt gtcccttact tccaggaaca tcaaccacca gcacggggcc atgcaagacc 660  
tgcacgattc ctgctcgagg aacctctatg tttccctctt gttgctgtac aaaaccttcg 720  
gacagaaact gcacttgat tcccatccca tcatcctggg ctttcgcaag attcctatgg 780  
gagtgggcct cagtcggtt ctctggctc agtttactag tgccatttgt tcagtgggtc 840  
gtagggtttt ccccccactgt ttggctttca gttatatgga tgatgtggta ttgggggcca 900  
agtctgtaca acatcttgag tcccttttta cctctattac caattttctt ttgtctttgg 960  
gtatacatt 969

<210> 69  
<211> 323  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Artificially  
synthesized sequence

<400> 69  
Met Gly Thr Asn Leu Ser Val Pro Asn Pro Leu Gly Phe Phe Pro Asp  
1 5 10 15  
His Gln Leu Asp Pro Ala Phe Gly Ala Asn Ser Asn Asn Pro Asp Trp  
20 25 30  
Gly Gly Arg Met Asn Ser Asp Ser Glu Cys Pro Leu Ser His Asp Gly  
35 40 45  
Tyr Cys Leu His Asp Gly Val Cys Met Tyr Ile Glu Ala Leu Asp Lys

## Sequence Listing.txt

50                      55                      60  
 Tyr Ala Cys Asn Cys Val Val Gly Tyr Ile Gly Glu Arg Cys Gln Tyr  
 65                      70                      75                      80  
 Arg Asp Leu Lys Trp Trp Glu Leu Arg Lys Ala Ala Ala Pro Ala Pro  
                     85                      90                      95  
 Asn Met Glu Asn Thr Thr Ser Gly Phe Leu Gly Pro Leu Leu Val Leu  
                     100                      105                      110  
 Gln Ala Gly Phe Phe Leu Leu Thr Arg Ile Leu Thr Ile Pro Gln Ser  
                     115                      120                      125  
 Leu Asp Ser Trp Trp Thr Ser Leu Asn Phe Leu Gly Gly Ala Pro Thr  
                     130                      135                      140  
 Cys Pro Gly Gln Asn Ser Gln Ser Pro Thr Ser Asn His Ser Pro Thr  
 145                      150                      155                      160  
 Ser Cys Pro Pro Ile Cys Pro Gly Tyr Arg Trp Met Cys Leu Arg Arg  
                     165                      170                      175  
 Phe Ile Ile Phe Leu Phe Ile Leu Leu Leu Cys Leu Ile Phe Leu Leu  
                     180                      185                      190  
 Val Leu Leu Asp Tyr Gln Gly Met Leu Pro Val Cys Pro Leu Leu Pro  
                     195                      200                      205  
 Gly Thr Ser Thr Thr Ser Thr Gly Pro Cys Lys Thr Cys Thr Ile Pro  
                     210                      215                      220  
 Ala Arg Gly Thr Ser Met Phe Pro Ser Cys Cys Cys Thr Lys Pro Ser  
 225                      230                      235                      240  
 Asp Arg Asn Cys Thr Cys Ile Pro Ile Pro Ser Ser Trp Ala Phe Ala  
                     245                      250                      255  
 Arg Phe Leu Trp Glu Trp Ala Ser Val Arg Phe Ser Trp Leu Ser Leu  
                     260                      265                      270  
 Leu Val Pro Phe Val Gln Trp Phe Val Gly Leu Ser Pro Thr Val Trp  
                     275                      280                      285  
 Leu Ser Val Ile Trp Met Met Trp Tyr Trp Gly Pro Ser Leu Tyr Asn  
                     290                      295                      300  
 Ile Leu Ser Pro Phe Leu Pro Leu Leu Pro Ile Phe Phe Cys Leu Trp  
 305                      310                      315                      320  
 Val Tyr Ile

&lt;210&gt; 70

&lt;211&gt; 828

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence:Artificially  
synthesized sequence



# Sequence Listing.txt

<400> 70

```
atgggggacga atcttttctgt tcccaatcct ctgggattct ttcccgatca ccagttggac 60
cctgcgttcg gagccaactc aaacaatcca gattggggcg gccgctggag ccacccgcag 120
ttcgaaaaag cggccgcccc tgcaccgaac atggagaaca caacatcagg attcctagga 180
cccctgctcg tgttacaggc ggggtttttc ttgttgacaa gaatcctcac aataccacag 240
agtctagact cgtggtgagg ttctctcaat ttcttagggg gagcaccac gtgtcctggc 300
caaaattcgc agtccccaac ctccaatcac tcaccaacct ctgtcctcc aatttgcct 360
ggctatcgct ggatgtgtct gcggcgtttt atcatattcc tcttcattct gctgctatgc 420
ctcatcttct tgttggttct tctggactac caaggtatgt tgcccgtttg tcctctactt 480
ccaggaacat caaccaccag cacggggcca tgcaagacct gcacgattcc tgctcaagga 540
acctctatgt ttccctcttg ttgctgtaca aaaccttcgg acggaactg cacttgatt 600
cccatcccat catcctgggc tttcgcaaga ttctatggg agtgggcctc agtccgtttc 660
tcctggctca gtttactagt gccatttgtt cagtgggttc tagggctttc cccactgtt 720
tggctttcag ttatatggat gatgtggtat tgggggccaa gtctgtacaa catcttgagt 780
ccctttttac ctctattacc aattttcttt tgtctttggg tatacatt 828
```

<210> 71

<211> 276

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 71

```
Met Gly Thr Asn Leu Ser Val Pro Asn Pro Leu Gly Phe Phe Pro Asp
 1          5          10          15

His Gln Leu Asp Pro Ala Phe Gly Ala Asn Ser Asn Asn Pro Asp Trp
          20          25          30

Gly Gly Arg Trp Ser His Pro Gln Phe Glu Lys Ala Ala Ala Pro Ala
          35          40          45

Pro Asn Met Glu Asn Thr Thr Ser Gly Phe Leu Gly Pro Leu Leu Val
          50          55          60

Leu Gln Ala Gly Phe Phe Leu Leu Thr Arg Ile Leu Thr Ile Pro Gln
          65          70          75          80

Ser Leu Asp Ser Trp Trp Thr Ser Leu Asn Phe Leu Gly Gly Ala Pro
          85          90          95

Thr Cys Pro Gly Gln Asn Ser Gln Ser Pro Thr Ser Asn His Ser Pro
          100          105          110

Thr Ser Cys Pro Pro Ile Cys Pro Gly Tyr Arg Trp Met Cys Leu Arg
          115          120          125

Arg Phe Ile Ile Phe Leu Phe Ile Leu Leu Leu Cys Leu Ile Phe Leu
          130          135          140

Leu Val Leu Leu Asp Tyr Gln Gly Met Leu Pro Val Cys Pro Leu Leu
          145          150          155          160

Pro Gly Thr Ser Thr Thr Ser Thr Gly Pro Cys Lys Thr Cys Thr Ile
          165          170          175

Pro Ala Gln Gly Thr Ser Met Phe Pro Ser Cys Cys Cys Thr Lys Pro
          180          185          190
```

Sequence Listing.txt

Ser Asp Gly Asn Cys Thr Cys Ile Pro Ile Pro Ser Ser Trp Ala Phe  
 195 205  
 Ala Arg Phe Leu Trp Glu Trp Ala Ser Val Arg Phe Ser Trp Leu Ser  
 210 215 220  
 Leu Leu Val Pro Phe Val Gln Trp Phe Val Gly Leu Ser Pro Thr Val  
 225 230 235 240  
 Trp Leu Ser Val Ile Trp Met Met Trp Tyr Trp Gly Pro Ser Leu Tyr  
 245 250 255  
 Asn Ile Leu Ser Pro Phe Leu Pro Leu Leu Pro Ile Phe Phe Cys Leu  
 260 265 270  
 Trp Val Tyr Ile  
 275

<210> 72  
 <211> 828  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence:Artificially  
 synthesized sequence

<400> 72  
 atgggggacga atcttttctgt tcccaatcct ctgggattct ttcccgatca ccagttggac 60  
 cctgcgttcg gagccaactc aaacaatcca gattggggcg gccgctggag ccaccgcag 120  
 ttcgaaaaag cggccgcccc tgcaccgaac atggagaaca caacatcagg attcctagga 180  
 cccctgctcg tgttacaggc ggggtttttc ttgttgacaa gaatcctcac aataccacag 240  
 agtctagact cgtggtggac ttctctcaat ttctagggg gagcaccac gtgtcctggc 300  
 caaaattcgc agtccccaac ctccaatcac tcaccaacct ctgtcctcc aatttgcct 360  
 ggctatcgct ggatgtgtct gcggcgtttt atcatattcc tcttcacct gctgctatgc 420  
 ctcatcttct tgttggttct tctggactac caaggtatgt tgcccgtttg tcctctactt 480  
 ccaggaacat caaccaccag cacggggcca tgcaagacct gcacgattcc tgctcgagga 540  
 acctctatgt ttccctcttg ttgctgtaca aaaccttcgg acggaaactg cacttgatt 600  
 cccatcccat catcctgggc ttctgcaaga ttccatagg agtgggcctc agtccgtttc 660  
 tcctggctca gtttactagt gccatttgtt cagtggttcg tagggctttc cccactgtt 720  
 tggctttcag ttatatggat gatgtggtat tgggggcaa gtctgtacaa catcttgagt 780  
 cccitttttac ctctattacc aattttcttt tgtctttggg tatacatt 828

<210> 73  
 <211> 276  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence:Artificially  
 synthesized sequence

<400> 73  
 Met Gly Thr Asn Leu Ser Val Pro Asn Pro Leu Gly Phe Phe Pro Asp  
 1 5 10 15  
 His Gln Leu Asp Pro Ala Phe Gly Ala Asn Ser Asn Asn Pro Asp Trp  
 20 25 30  
 Gly Gly Arg Trp Ser His Pro Gln Phe Glu Lys Ala Ala Ala Pro Ala  
 35 40 45

# Sequence Listing.txt

Pro Asn Met Glu Asn Thr Thr Ser Gly Phe Leu Gly Pro Leu Leu Val  
50 55 60  
Leu Gln Ala Gly Phe Phe Leu Leu Thr Arg Ile Leu Thr Ile Pro Gln  
65 70 75 80  
Ser Leu Asp Ser Trp Trp Thr Ser Leu Asn Phe Leu Gly Gly Ala Pro  
85 90 95  
Thr Cys Pro Gly Gln Asn Ser Gln Ser Pro Thr Ser Asn His Ser Pro  
100 105 110  
Thr Ser Cys Pro Pro Ile Cys Pro Gly Tyr Arg Trp Met Cys Leu Arg  
115 120 125  
Arg Phe Ile Ile Phe Leu Phe Ile Leu Leu Leu Cys Leu Ile Phe Leu  
130 135 140  
Leu Val Leu Leu Asp Tyr Gln Gly Met Leu Pro Val Cys Pro Leu Leu  
145 150 155 160  
Pro Gly Thr Ser Thr Thr Ser Thr Gly Pro Cys Lys Thr Cys Thr Ile  
165 170 175  
Pro Ala Arg Gly Thr Ser Met Phe Pro Ser Cys Cys Cys Thr Lys Pro  
180 185 190  
Ser Asp Gly Asn Cys Thr Cys Ile Pro Ile Pro Ser Ser Trp Ala Phe  
195 200 205  
Ala Arg Phe Leu Trp Glu Trp Ala Ser Val Arg Phe Ser Trp Leu Ser  
210 215 220  
Leu Leu Val Pro Phe Val Gln Trp Phe Val Gly Leu Ser Pro Thr Val  
225 230 235 240  
Trp Leu Ser Val Ile Trp Met Met Trp Tyr Trp Gly Pro Ser Leu Tyr  
245 250 255  
Asn Ile Leu Ser Pro Phe Leu Pro Leu Leu Pro Ile Phe Phe Cys Leu  
260 265 270  
Trp Val Tyr Ile  
275

<210> 74

<211> 828

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially  
synthesized sequence

<400> 74

atggggacga atctttctgt tcccaatcct ctgggattct ttcccgatca ccagttggac 60  
cctgcgttcg gagccaactc aaacaatcca gattggggcg gccgctggag ccacccgcag 120  
ttcgaaaaag cggccgcccc tgcaccgaac atggagaaca caacatcagg attcctagga 180  
cccctgctcg tgttacaggc ggggtttttc ttgttgacaa gaatcctcac aataccacag 240  
agtctagact cgtggtggac ttctctcaat tttctagggg gagcaccac gtgtcctggc 300  
caaaattcgc agtccccaac ctccaatcac tcaccaacct cttgtcctcc aatttgcct 360

# Sequence Listing.txt

```

ggctatcgct ggatgtgtct gcggcgtttt atcatattcc tcttcacccct gctgctatgc 420
ctcatcttct tgttggttct tctggactac caaggatgtg tgcccgtttg tcctctactt 480
ccaggaacat caaccaccag cacggggcca tgcaagacct gcacgattcc tgctcaagga 540
acctctatgt ttccctcttg ttgctgtaca aaaccttcgg acagaaactg cacttgattt 600
cccatcccat catcctgggc tticgcaaga ttctatggg agtgggcctc agtccgtttc 660
tcctggctca gtttactagt gccatttgtt cagtgggtcg tagggctttc cccactgtt 720
tggctttcag ttatatggat gatgtggtat tgggggcca gtctgtacaa catcttgagt 780
ccctttttac ctctattacc aattttcttt tgtctttggg tatacatt 828

```

<210> 75

<211> 276

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 75

```

Met Gly Thr Asn Leu Ser Val Pro Asn Pro Leu Gly Phe Phe Pro Asp
 1          5          10
His Gln Leu Asp Pro Ala Phe Gly Ala Asn Ser Asn Asn Pro Asp Trp
          20          25          30
Gly Gly Arg Trp Ser His Pro Gln Phe Glu Lys Ala Ala Ala Pro Ala
          35          40          45
Pro Asn Met Glu Asn Thr Thr Ser Gly Phe Leu Gly Pro Leu Leu Val
          50          55          60
Leu Gln Ala Gly Phe Phe Leu Leu Thr Arg Ile Leu Thr Ile Pro Gln
          65          70          75          80
Ser Leu Asp Ser Trp Trp Thr Ser Leu Asn Phe Leu Gly Gly Ala Pro
          85          90          95
Thr Cys Pro Gly Gln Asn Ser Gln Ser Pro Thr Ser Asn His Ser Pro
          100          105          110
Thr Ser Cys Pro Pro Ile Cys Pro Gly Tyr Arg Trp Met Cys Leu Arg
          115          120          125
Arg Phe Ile Ile Phe Leu Phe Ile Leu Leu Leu Cys Leu Ile Phe Leu
          130          135          140
Leu Val Leu Leu Asp Tyr Gln Gly Met Leu Pro Val Cys Pro Leu Leu
          145          150          155          160
Pro Gly Thr Ser Thr Thr Ser Thr Gly Pro Cys Lys Thr Cys Thr Ile
          165          170          175
Pro Ala Gln Gly Thr Ser Met Phe Pro Ser Cys Cys Cys Thr Lys Pro
          180          185          190
Ser Asp Arg Asn Cys Thr Cys Ile Pro Ile Pro Ser Ser Trp Ala Phe
          195          200          205
Ala Arg Phe Leu Trp Glu Trp Ala Ser Val Arg Phe Ser Trp Leu Ser
          210          215          220
Leu Leu Val Pro Phe Val Gln Trp Phe Val Gly Leu Ser Pro Thr Val

```

```

Sequence Listing.txt
225           230           235           240
Trp Leu Ser Val Ile Trp Met Met Trp Tyr Trp Gly Pro Ser Leu Tyr
                245                250                255
Asn Ile Leu Ser Pro Phe Leu Pro Leu Leu Pro Ile Phe Phe Cys Leu
                260                265                270
Trp Val Tyr Ile
                275

```

<210> 76  
<211> 828  
<212> DNA  
<213> Artificial Sequence

<220> .  
<223> Description of Artificial Sequence:Artificially synthesized sequence

| <400> 76    |             |            |            |            |             |     |
|-------------|-------------|------------|------------|------------|-------------|-----|
| atgggggacga | atcttttctgt | tcccaatcct | ctgggattct | ttcccgatca | ccagttggac  | 60  |
| cctgcgttctg | gagccaactc  | aaacaatcca | gattggggcg | gccgctggag | ccaccgcgag  | 120 |
| ttcgaaaaaag | cggcgcgc    | tgaccggaac | atggagaaca | caacatcagg | attctctagga | 180 |
| cccttgctcg  | tgttacaggc  | gggttttttc | ttgttgacaa | gaatcctcac | aataccacag  | 240 |
| agtctagact  | cggtgtggac  | tgtctcaat  | tttctagggg | gagcaccac  | gtgtcctggc  | 300 |
| caaaattcgc  | agtccccaac  | ctccaatcac | tcaccaacct | cttgtcctcc | aatttgtcct  | 360 |
| ggctatcgt   | ggatgtgtct  | gcgggtcttt | atcatattcc | tcttcatctt | gctgtctatgc | 420 |
| ctcatcttct  | tgttggttct  | tctggactac | caaggtatgt | tgcccgtttg | tcctctactt  | 480 |
| ccaggaacat  | caaccaccag  | cacggggcca | tgcaagacct | gcacgattcc | tgctcgagga  | 540 |
| acctctatgt  | ttccctcttg  | ttgctgtaca | aaaccttcgg | acagaaactg | cacttgatt   | 600 |
| cccatcccat  | catcctgggc  | tttcgcaaga | ttcctatggg | agtgggcctc | agtccgtttc  | 660 |
| tcctgggtca  | gtttactagt  | gccatttgtt | cagtggttcg | tagggctttc | ccccactggt  | 720 |
| tggctttcag  | ttatatggat  | gatgtgggat | tgggggccaa | gtctgtacaa | catcttgagt  | 780 |
| cccttttttac | ctctattacc  | aattttcttt | tgtctttggg | tatacatt   |             | 828 |

```
<210> 77
<211> 276
<212> PRT
<213> Artificial Sequence
```

<220>  
<223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 77  
Met Gly Thr Asn Leu Ser Val Pro Asn Pro Leu Gly Phe Phe Pro Asp  
1 5 10 15  
His Gln Leu Asp Pro Ala Phe Gly Ala Asn Ser Asn Asn Pro Asp Trp  
20 25 30  
Gly Gly Arg Trp Ser His Pro Gln Phe Glu Lys Ala Ala Ala Pro Ala  
35 40 45  
Pro Asn Met Glu Asn Thr Thr Ser Gly Phe Leu Gly Pro Leu Leu Val  
50 55 60  
Leu Gln Ala Gly Phe Phe Leu Leu Thr Arg Ile Leu Thr Ile Pro Gln  
65 70 75 80

# Sequence Listing.txt

Ser Leu Asp Ser Trp Trp Thr Ser Leu Asn Phe Leu Gly Gly Ala Pro  
85 90 95  
Thr Cys Pro Gly Gln Asn Ser Gln Ser Pro Thr Ser Asn His Ser Pro  
100 105 110  
Thr Ser Cys Pro Pro Ile Cys Pro Gly Tyr Arg Trp Met Cys Leu Arg  
115 120 125  
Arg Phe Ile Ile Phe Leu Phe Ile Leu Leu Leu Cys Leu Ile Phe Leu  
130 135 140  
Leu Val Leu Leu Asp Tyr Gln Gly Met Leu Pro Val Cys Pro Leu Leu  
145 150 155 160  
Pro Gly Thr Ser Thr Thr Ser Thr Gly Pro Cys Lys Thr Cys Thr Ile  
165 170 175  
Pro Ala Arg Gly Thr Ser Met Phe Pro Ser Cys Cys Cys Thr Lys Pro  
180 185 190  
Ser Asp Arg Asn Cys Thr Cys Ile Pro Ile Pro Ser Ser Trp Ala Phe  
195 200 205  
Ala Arg Phe Leu Trp Glu Trp Ala Ser Val Arg Phe Ser Trp Leu Ser  
210 215 220  
Leu Leu Val Pro Phe Val Gln Trp Phe Val Gly Leu Ser Pro Thr Val  
225 230 235 240  
Trp Leu Ser Val Ile Trp Met Met Trp Tyr Trp Gly Pro Ser Leu Tyr  
245 250 255  
Asn Ile Leu Ser Pro Phe Leu Pro Leu Leu Pro Ile Phe Phe Cys Leu  
260 265 270  
Trp Val Tyr Ile  
275

<210> 78

<211> 1221

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 78

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| atggggacga | atctttctgt | tccaatcct  | ctgggattct | ttcccgatca | ccagttggac | 60  |
| cctgcgttcg | gagccaactc | aaacaatcca | gattgggact | tcaaccccaa | caaggatcaa | 120 |
| tggccagagg | caaatcaggt | aggagcgggc | ggccgcgcgc | aacacgatga | agccgtagac | 180 |
| aacaaattca | acaaagaaca | acaaaacgcg | ttctatgaga | tcttacattt | acctaactta | 240 |
| aacgaagaac | aacgaaacgc | cttcattcaa | agttttaaag | atgacccaag | ccaaagcgct | 300 |
| aaccttttag | cagaagctaa | aaagctaaat | gatgtcagg  | cgccgaaagt | agacaacaaa | 360 |
| ttcaacaaag | aacaacaaaa | cgcgttctat | gagatcttac | atttacctaa | cttaaacgaa | 420 |
| gaacaacgaa | acgccttcat | ccaaagttaa | aaagatgacc | caagccaaag | cgctaacctt | 480 |
| ttagcagaag | ctaaaaagct | aaatgatgct | caggcgccga | aagcggccgc | ccctgcaccg | 540 |
| aacatggaga | acacaacatc | aggattccta | ggacccctgc | tcgtgttaca | ggcgggggtt | 600 |
| ttcttggtga | caagaatcct | cacaatatca | cagagtctag | actcgtggtg | gacttctctc | 660 |
| aattttctag | ggggagcacc | cacgtgtcct | ggccaaaatt | cgcagtcccc | aacctccaat | 720 |
| cactcaccaa | cctcttgtcc | tccaatttgt | cctggctatc | gctggatgtg | tctgcggcgt | 780 |

# Sequence Listing.txt

```

tttatcatat tcctcttcat cctgctgcta tgcctcatct tcttggtggt tcttctggac 840
taccaaggta tgttgcccggt ttgtcctcta cttccaggaa catcaaccac cagcacgggg 900
ccatgcaaga cctgcacgat tcctgctcaa ggaacctcta tgttccctc ttgttgctgt 960
acaaaacctt cggacggaaa ctgcacttgt attcccatcc catcatcctg ggctttcgca 1020
agattcctat gggagtgggc ctgagtcctg ttctcctggc tcagtttact agtgccattt 1080
gttcagtggg tcgtaggggt ttccccact gtttggctt cagttatatg gatgatgtgg 1140
tattgggggc caagtctgta caacatcttg agtcccttt tacctctatt accaattttc 1200
ttttgtcttt gggatatacat t 1221

```

<210> 79

<211> 407

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 79

Met Gly Thr Asn Leu Ser Val Pro Asn Pro Leu Gly Phe Phe Pro Asp  
1 5 10 15

His Gln Leu Asp Pro Ala Phe Gly Ala Asn Ser Asn Asn Pro Asp Trp  
20 25 30

Asp Phe Asn Pro Asn Lys Asp Gln Trp Pro Glu Ala Asn Gln Val Gly  
35 40 45

Ala Gly Gly Arg Ala Gln His Asp Glu Ala Val Asp Asn Lys Phe Asn  
50 55 60

Lys Glu Gln Gln Asn Ala Phe Tyr Glu Ile Leu His Leu Pro Asn Leu  
65 70 75 80

Asn Glu Glu Gln Arg Asn Ala Phe Ile Gln Ser Leu Lys Asp Asp Pro  
85 90 95

Ser Gln Ser Ala Asn Leu Leu Ala Glu Ala Lys Lys Leu Asn Asp Ala  
100 105 110

Gln Ala Pro Lys Val Asp Asn Lys Phe Asn Lys Glu Gln Gln Asn Ala  
115 120 125

Phe Tyr Glu Ile Leu His Leu Pro Asn Leu Asn Glu Glu Gln Arg Asn  
130 135 140

Ala Phe Ile Gln Ser Leu Lys Asp Asp Pro Ser Gln Ser Ala Asn Leu  
145 150 155 160

Leu Ala Glu Ala Lys Lys Leu Asn Asp Ala Gln Ala Pro Lys Ala Ala  
165 170 175

Ala Pro Ala Pro Asn Met Glu Asn Thr Thr Ser Gly Phe Leu Gly Pro  
180 185 190

Leu Leu Val Leu Gln Ala Gly Phe Phe Leu Leu Thr Arg Ile Leu Thr  
195 200 205

Ile Pro Gln Ser Leu Asp Ser Trp Trp Thr Ser Leu Asn Phe Leu Gly  
210 215 220

Gly Ala Pro Thr Cys Pro Gly Gln Asn Ser Gln Ser Pro Thr Ser Asn

## Sequence Listing.txt

225                      230                      235                      240  
 His Ser Pro Thr Ser Cys Pro Pro Ile Cys Pro Gly Tyr Arg Trp Met  
                                  245                                   250                                   255  
 Cys Leu Arg Arg Phe Ile Ile Phe Leu Phe Ile Leu Leu Leu Cys Leu  
                                  260                                   265                                   270  
 Ile Phe Leu Leu Val Leu Leu Asp Tyr Gln Gly Met Leu Pro Val Cys  
                                  275                                   280                                   285  
 Pro Leu Leu Pro Gly Thr Ser Thr Thr Ser Thr Gly Pro Cys Lys Thr  
                                  290                                   295                                   300  
 Cys Thr Ile Pro Ala Gln Gly Thr Ser Met Phe Pro Ser Cys Cys Cys  
                                  305                                   310                                   315                                   320  
 Thr Lys Pro Ser Asp Gly Asn Cys Thr Cys Ile Pro Ile Pro Ser Ser  
                                  325                                   330                                   335  
 Trp Ala Phe Ala Arg Phe Leu Trp Glu Trp Ala Ser Val Arg Phe Ser  
                                  340                                   345                                   350  
 Trp Leu Ser Leu Leu Val Pro Phe Val Gln Trp Phe Val Gly Leu Ser  
                                  355                                   360                                   365  
 Pro Thr Val Trp Leu Ser Val Ile Trp Met Met Trp Tyr Trp Gly Pro  
                                  370                                   375                                   380  
 Ser Leu Tyr Asn Ile Leu Ser Pro Phe Leu Pro Leu Leu Pro Ile Phe  
                                  385                                   390                                   395                                   400  
 Phe Cys Leu Trp Val Tyr Ile  
                                  405

&lt;210&gt; 80

&lt;211&gt; 1221

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence:Artificially synthesized sequence

&lt;400&gt; 80

|            |             |            |            |             |             |      |
|------------|-------------|------------|------------|-------------|-------------|------|
| atggggacga | atcttttctgt | tcccaatcct | ctgggattct | ttcccgatca  | ccagttggac  | 60   |
| cctgcttcg  | gagccaactc  | aaacaatcca | gattgggact | tcaaccccaa  | caaggatcaa  | 120  |
| tgccagagg  | caaatcaggt  | aggagcgggc | ggccgcgcgc | aacacgatga  | agccgtagac  | 180  |
| aacaaattca | acaaagaaca  | acaaaacgcg | ttctatgaga | tcttacattt  | acctaactta  | 240  |
| aacgaagaac | aacgaaacgc  | cttcatccaa | agttaaag   | atgacccaag  | ccaaagcgt   | 300  |
| aaccttttag | cagaagctaa  | aaagctaaat | gatgtcagg  | cgccgaaagt  | agacaacaaa  | 360  |
| ttcaacaaag | aacaacaaaa  | cgcgttctat | gagatcttac | atttacctaa  | cttaaacgaa  | 420  |
| gaacaacgaa | acgccttcat  | ccaaagttaa | aaagatgacc | caagccaaag  | cgctaacctt  | 480  |
| ttagcagaag | ctaaaaagct  | aaatgatgct | caggcgccga | aagcggccgc  | ccctgcaccg  | 540  |
| aacatggaga | acacaacatc  | aggattccta | ggacccctgc | tcgtgtttaca | ggcggggttt  | 600  |
| ttcttggtga | caagaatcct  | cacaatacca | cagagtctag | actcgtggtg  | gacttctctc  | 660  |
| aattttctag | ggggagcacc  | cacgtgtcct | ggccaaaatt | cgcagtcccc  | aacctccaat  | 720  |
| cactcaccaa | cctcttgctc  | tccaatttgt | cctggctatc | gctggatgtg  | tctgcggcgt  | 780  |
| tttatcatat | tcctcttcat  | cctgctgcta | tgcctcatct | tcttggttgt  | tcttctggac  | 840  |
| taccaaggta | tggtgcccgt  | ttgtcctcta | cttcaggaa  | catcaaccac  | cagcacgggg  | 900  |
| ccatgcaaga | cctgcacgat  | tcctgtctga | ggaacctcta | tgtttccctc  | ttgttgctgt  | 960  |
| acaaaacctt | cggacggaaa  | ctgcacttgt | attcccatcc | catcatcctg  | ggcttttcgca | 1020 |



# Sequence Listing.txt

```

agattcctat gggagtgggc ctcaagtccgt ttctcctggc tcagtttact agtgccattt 1080
gttcagtggg tcgtaggggt ttccccctact gtttggcttt cagttatatg gatgatgtgg 1140
tattgggggc caagtctgta caacatcttg agtccctttt tacctctatt accaattttc 1200
ttttgtcttt gggatacat t 1221

```

<210> 81  
 <211> 407  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence:Artificially  
 synthesized sequence

<400> 81  
 Met Gly Thr Asn Leu Ser Val Pro Asn Pro Leu Gly Phe Phe Pro Asp  
 1 5 10 15  
 His Gln Leu Asp Pro Ala Phe Gly Ala Asn Ser Asn Asn Pro Asp Trp  
 20 25 30  
 Asp Phe Asn Pro Asn Lys Asp Gln Trp Pro Glu Ala Asn Gln Val Gly  
 35 40 45  
 Ala Gly Gly Arg Ala Gln His Asp Glu Ala Val Asp Asn Lys Phe Asn  
 50 55 60  
 Lys Glu Gln Gln Asn Ala Phe Tyr Glu Ile Leu His Leu Pro Asn Leu  
 65 70 75 80  
 Asn Glu Glu Gln Arg Asn Ala Phe Ile Gln Ser Leu Lys Asp Asp Pro  
 85 90 95  
 Ser Gln Ser Ala Asn Leu Leu Ala Glu Ala Lys Lys Leu Asn Asp Ala  
 100 105 110  
 Gln Ala Pro Lys Val Asp Asn Lys Phe Asn Lys Glu Gln Gln Asn Ala  
 115 120 125  
 Phe Tyr Glu Ile Leu His Leu Pro Asn Leu Asn Glu Glu Gln Arg Asn  
 130 135 140  
 Ala Phe Ile Gln Ser Leu Lys Asp Asp Pro Ser Gln Ser Ala Asn Leu  
 145 150 155 160  
 Leu Ala Glu Ala Lys Lys Leu Asn Asp Ala Gln Ala Pro Lys Ala Ala  
 165 170 175  
 Ala Pro Ala Pro Asn Met Glu Asn Thr Thr Ser Gly Phe Leu Gly Pro  
 180 185 190  
 Leu Leu Val Leu Gln Ala Gly Phe Phe Leu Leu Thr Arg Ile Leu Thr  
 195 200 205  
 Ile Pro Gln Ser Leu Asp Ser Trp Trp Thr Ser Leu Asn Phe Leu Gly  
 210 215 220  
 Gly Ala Pro Thr Cys Pro Gly Gln Asn Ser Gln Ser Pro Thr Ser Asn  
 225 230 235 240  
 His Ser Pro Thr Ser Cys Pro Pro Ile Cys Pro Gly Tyr Arg Trp Met  
 245 250 255

# Sequence Listing.txt

Cys Leu Arg Arg Phe Ile Ile Phe Leu Phe Ile Leu Leu Leu Cys Leu  
260 265 270  
Ile Phe Leu Leu Val Leu Leu Asp Tyr Gln Gly Met Leu Pro Val Cys  
275 280 285  
Pro Leu Leu Pro Gly Thr Ser Thr Thr Ser Thr Gly Pro Cys Lys Thr  
290 295 300  
Cys Thr Ile Pro Ala Arg Gly Thr Ser Met Phe Pro Ser Cys Cys Cys  
305 310 315 320  
Thr Lys Pro Ser Asp Gly Asn Cys Thr Cys Ile Pro Ile Pro Ser Ser  
325 330 335  
Trp Ala Phe Ala Arg Phe Leu Trp Glu Trp Ala Ser Val Arg Phe Ser  
340 345 350  
Trp Leu Ser Leu Leu Val Pro Phe Val Gln Trp Phe Val Gly Leu Ser  
355 360 365  
Pro Thr Val Trp Leu Ser Val Ile Trp Met Met Trp Tyr Trp Gly Pro  
370 375 380  
Ser Leu Tyr Asn Ile Leu Ser Pro Phe Leu Pro Leu Leu Pro Ile Phe  
385 390 395 400  
Phe Cys Leu Trp Val Tyr Ile  
405

<210> 82

<211> 1221

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 82

|             |             |            |             |            |            |      |
|-------------|-------------|------------|-------------|------------|------------|------|
| atggggacga  | atcttttctgt | tccaatcct  | ctgggattct  | ttcccgatca | ccagttggac | 60   |
| cctgcgttcg  | gagccaactc  | aaacaatcca | gattgggact  | tcaaccccaa | caaggatcaa | 120  |
| tggccagagg  | caaatcaggt  | aggagcgggc | ggccgcgcgc  | aacacgatga | agccgtagac | 180  |
| aacaaattca  | acaaagaaca  | acaaaacgcg | ttctatgaga  | tcttacattt | acctaactta | 240  |
| aacgaagaac  | aacgaaacgc  | cttcatccaa | agtttaaaaag | atgacccaag | ccaaagcgct | 300  |
| aaccttttag  | cagaagctaa  | aaagctaaat | gatgctcagg  | cgccgaaagt | agacaacaaa | 360  |
| ttcaacaaag  | aacaacaaaa  | cgcgttctat | gagatcttac  | atttacctaa | cttaaacgaa | 420  |
| gaacaacgaa  | acgccttcat  | ccaaagttta | aaagatgacc  | caagccaaag | cgtaaacctt | 480  |
| ttagcagaag  | ctaaaaagct  | aaatgatgct | caggcgccga  | aagcggccgc | ccctgcaccg | 540  |
| aacatggaga  | acacaacatc  | aggattccta | ggacccctgc  | tcgtgttaca | ggcggggttt | 600  |
| ttcttggtga  | caagaatcct  | cacaatacca | cagagtctag  | actcgtggtg | gacttctctc | 660  |
| aatttttctag | ggggagcacc  | cacgtgtcct | ggccaaaatt  | cgcagtcccc | aacctccaat | 720  |
| cactcaccaa  | cctcttgtcc  | tccaatttgt | cctggctatc  | gctggatgtg | tctgcggcgt | 780  |
| tttatcatat  | tctcttctcat | cctgctgtca | tgcctcatct  | tcttggttgt | tcttctggac | 840  |
| taccaaggta  | tgttgcccgt  | ttgtcctcta | cttcaggaa   | catcaaccac | cagcacgggg | 900  |
| ccatgcaaga  | cctgcacgat  | tcctgctcaa | ggaacctcta  | tgtttccctc | ttgttgctgt | 960  |
| acaaaacctt  | cggacagaaa  | ctgcacttgt | attcccatcc  | catcatcctg | ggctttcgca | 1020 |
| agattcctat  | gggagtgggc  | ctcagtcctg | ttctcctggc  | tcagtttact | agtgccattt | 1080 |
| gttcagtggg  | tcgtagggct  | ttccccactt | gtttggcttt  | cagttatatg | gatgatgtgg | 1140 |
| tattgggggc  | caagtctgta  | caacatcttg | agtccctttt  | tacctctatt | accaattttc | 1200 |
| ttttgtcttt  | gggtatacat  | t          |             |            |            | 1221 |

# Sequence Listing.txt

<210> 83  
 <211> 407  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence:Artificially  
 synthesized sequence

<400> 83  
 Met Gly Thr Asn Leu Ser Val Pro Asn Pro Leu Gly Phe Phe Pro Asp  
 1 5 10 15  
 His Gln Leu Asp Pro Ala Phe Gly Ala Asn Ser Asn Asn Pro Asp Trp  
 20 25 30  
 Asp Phe Asn Pro Asn Lys Asp Gln Trp Pro Glu Ala Asn Gln Val Gly  
 35 40 45  
 Ala Gly Gly Arg Ala Gln His Asp Glu Ala Val Asp Asn Lys Phe Asn  
 50 55 60  
 Lys Glu Gln Gln Asn Ala Phe Tyr Glu Ile Leu His Leu Pro Asn Leu  
 65 70 75 80  
 Asn Glu Glu Gln Arg Asn Ala Phe Ile Gln Ser Leu Lys Asp Asp Pro  
 85 90 95  
 Ser Gln Ser Ala Asn Leu Leu Ala Glu Ala Lys Lys Leu Asn Asp Ala  
 100 105 110  
 Gln Ala Pro Lys Val Asp Asn Lys Phe Asn Lys Glu Gln Gln Asn Ala  
 115 120 125  
 Phe Tyr Glu Ile Leu His Leu Pro Asn Leu Asn Glu Glu Gln Arg Asn  
 130 135 140  
 Ala Phe Ile Gln Ser Leu Lys Asp Asp Pro Ser Gln Ser Ala Asn Leu  
 145 150 155 160  
 Leu Ala Glu Ala Lys Lys Leu Asn Asp Ala Gln Ala Pro Lys Ala Ala  
 165 170 175  
 Ala Pro Ala Pro Asn Met Glu Asn Thr Thr Ser Gly Phe Leu Gly Pro  
 180 185 190  
 Leu Leu Val Leu Gln Ala Gly Phe Phe Leu Leu Thr Arg Ile Leu Thr  
 195 200 205  
 Ile Pro Gln Ser Leu Asp Ser Trp Trp Thr Ser Leu Asn Phe Leu Gly  
 210 215 220  
 Gly Ala Pro Thr Cys Pro Gly Gln Asn Ser Gln Ser Pro Thr Ser Asn  
 225 230 235 240  
 His Ser Pro Thr Ser Cys Pro Pro Ile Cys Pro Gly Tyr Arg Trp Met  
 245 250 255  
 Cys Leu Arg Arg Phe Ile Ile Phe Leu Phe Ile Leu Leu Leu Cys Leu  
 260 265 270

Sequence Listing.txt

Ile Phe Leu Leu Val Leu Leu Asp Tyr Gln Gly Met Leu Pro Val Cys  
275 280 285  
Pro Leu Leu Pro Gly Thr Ser Thr Thr Ser Thr Gly Pro Cys Lys Thr  
290 295 300  
Cys Thr Ile Pro Ala Gln Gly Thr Ser Met Phe Pro Ser Cys Cys Cys  
305 310 315 320  
Thr Lys Pro Ser Asp Arg Asn Cys Thr Cys Ile Pro Ile Pro Ser Ser  
325 330 335  
Trp Ala Phe Ala Arg Phe Leu Trp Glu Trp Ala Ser Val Arg Phe Ser  
340 345 350  
Trp Leu Ser Leu Leu Val Pro Phe Val Gln Trp Phe Val Gly Leu Ser  
355 360 365  
Pro Thr Val Trp Leu Ser Val Ile Trp Met Met Trp Tyr Trp Gly Pro  
370 375 380  
Ser Leu Tyr Asn Ile Leu Ser Pro Phe Leu Pro Leu Leu Pro Ile Phe  
385 390 395 400  
Phe Cys Leu Trp Val Tyr Ile  
405

<210> 84

<211> 1221

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially  
synthesized sequence

<400> 84

|            |            |            |            |            |            |      |
|------------|------------|------------|------------|------------|------------|------|
| atggggacga | atctttctgt | tccaatcct  | ctgggattct | ttcccgatca | ccagttggac | 60   |
| cctgcgttcg | gagccaactc | aaacaatcca | gattgggact | tcaaccccaa | caaggatcaa | 120  |
| tggccagagg | caaatcaggt | aggagcgggc | ggccgcgcgc | aacacgatga | agccgtagac | 180  |
| aacaaattca | acaaagaaca | acaaaacgcg | ttctatgaga | tcttacat   | acctaactta | 240  |
| aacgaagaac | aacgaaacgc | cttcatccaa | agtttaaaag | atgacccaag | ccaaagcgct | 300  |
| aaccttttag | cagaagctaa | aaagctaaat | gatgctcagg | cgccgaaagt | agacaacaaa | 360  |
| ttcaacaaag | aacaacaaaa | cgcgttctat | gagatcttac | atttacctaa | cttaaacgaa | 420  |
| gaacaacgaa | acgccttcat | ccaaagttaa | aaagatgacc | caagccaaag | cgctaacctt | 480  |
| ttagcagaag | ctaaaaagct | aaatgatgct | caggcgccga | aagcgccgc  | ccctgcaccg | 540  |
| aacatggaga | acacaacatc | aggattccta | ggacccctgc | tcgtgttaca | ggcgggggtt | 600  |
| ttcttgttga | caagaatcct | cacaatacca | cacagtctag | actcgtggtg | gacttctctc | 660  |
| aattttctag | ggggagcacc | cacgtgtcct | ggccaaaatt | cgcagtcctc | aacctccaat | 720  |
| cactcaccaa | cctctgtgcc | tccaatttgt | cctggctatc | gctggatgtg | tctgcggcgt | 780  |
| tttatcatat | tcctcttcat | cctgctgcta | tgccctcatc | tcttgttggt | tcttctggac | 840  |
| taccaaggta | tggtgcccgt | ttgtcctcta | cttccaggaa | catcaaccac | cagcacgggg | 900  |
| ccatgcaaga | cctgcacgat | tcctgctcga | ggaacctcta | tgtttccctc | ttgttgctgt | 960  |
| acaaaacctt | cggacagaaa | ctgcacttgt | attccccatc | catcatcctg | ggctttcgca | 1020 |
| agattcctat | gggagtgggc | ctcagtcctg | ttctcctggc | tcagtttact | agtgccattt | 1080 |
| gttcagtggg | tcgtagggct | ttccccact  | gtttggcttt | cagttatatg | gatgatgtgg | 1140 |
| tattgggggc | caagtctgta | caacatcttg | agtccctttt | tacctctatt | accaattttc | 1200 |
| ttttgtcttt | gggtatacat | t          |            |            |            | 1221 |

<210> 85

<211> 407

Sequence Listing.txt

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 85

```

Met Gly Thr Asn Leu Ser Val Pro Asn Pro Leu Gly Phe Phe Pro Asp
 1          5          10          15
His Gln Leu Asp Pro Ala Phe Gly Ala Asn Ser Asn Asn Pro Asp Trp
          20          25          30
Asp Phe Asn Pro Asn Lys Asp Gln Trp Pro Glu Ala Asn Gln Val Gly
          35          40          45
Ala Gly Gly Arg Ala Gln His Asp Glu Ala Val Asp Asn Lys Phe Asn
          50          55          60
Lys Glu Gln Gln Asn Ala Phe Tyr Glu Ile Leu His Leu Pro Asn Leu
          65          70          75          80
Asn Glu Glu Gln Arg Asn Ala Phe Ile Gln Ser Leu Lys Asp Asp Pro
          85          90          95
Ser Gln Ser Ala Asn Leu Leu Ala Glu Ala Lys Lys Leu Asn Asp Ala
          100          105          110
Gln Ala Pro Lys Val Asp Asn Lys Phe Asn Lys Glu Gln Gln Asn Ala
          115          120          125
Phe Tyr Glu Ile Leu His Leu Pro Asn Leu Asn Glu Glu Gln Arg Asn
          130          135          140
Ala Phe Ile Gln Ser Leu Lys Asp Asp Pro Ser Gln Ser Ala Asn Leu
          145          150          155          160
Leu Ala Glu Ala Lys Lys Leu Asn Asp Ala Gln Ala Pro Lys Ala Ala
          165          170          175
Ala Pro Ala Pro Asn Met Glu Asn Thr Thr Ser Gly Phe Leu Gly Pro
          180          185          190
Leu Leu Val Leu Gln Ala Gly Phe Phe Leu Leu Thr Arg Ile Leu Thr
          195          200          205
Ile Pro Gln Ser Leu Asp Ser Trp Trp Thr Ser Leu Asn Phe Leu Gly
          210          215          220
Gly Ala Pro Thr Cys Pro Gly Gln Asn Ser Gln Ser Pro Thr Ser Asn
          225          230          235          240
His Ser Pro Thr Ser Cys Pro Pro Ile Cys Pro Gly Tyr Arg Trp Met
          245          250          255
Cys Leu Arg Arg Phe Ile Ile Phe Leu Phe Ile Leu Leu Leu Cys Leu
          260          265          270
Ile Phe Leu Leu Val Leu Leu Asp Tyr Gln Gly Met Leu Pro Val Cys
          275          280          285
Pro Leu Leu Pro Gly Thr Ser Thr Thr Ser Thr Gly Pro Cys Lys Thr

```

Sequence Listing.txt  
300

290

295

Cys Thr Ile Pro Ala Arg Gly Thr Ser Met Phe Pro Ser Cys Cys Cys  
305 310 315 320  
Thr Lys Pro Ser Asp Arg Asn Cys Thr Cys Ile Pro Ile Pro Ser Ser  
325 330 335  
Trp Ala Phe Ala Arg Phe Leu Trp Glu Trp Ala Ser Val Arg Phe Ser  
340 345 350  
Trp Leu Ser Leu Leu Val Pro Phe Val Gln Trp Phe Val Gly Leu Ser  
355 360 365  
Pro Thr Val Trp Leu Ser Val Ile Trp Met Met Trp Tyr Trp Gly Pro  
370 375 380  
Ser Leu Tyr Asn Ile Leu Ser Pro Phe Leu Pro Leu Leu Pro Ile Phe  
385 390 395 400  
Phe Cys Leu Trp Val Tyr Ile  
405

<210> 86

<211> 1020

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially  
synthesized sequence

<400> 86

|             |             |            |            |            |            |      |
|-------------|-------------|------------|------------|------------|------------|------|
| atgggggacga | atcttttctgt | tcccaatcct | ctgggattct | ttcccgatca | ccagttggac | 60   |
| cctgctgttcg | gagccaactc  | aaacaatcca | gattgggact | tcaaccccaa | caaggatcaa | 120  |
| tggccagagg  | caaatcaggt  | aggagcgggc | ggccgcatga | actctgattc | cgaatgcccg | 180  |
| ctgtctcatg  | acggttactg  | cctgcatgat | ggcgtatgca | tgtacatcga | agctctggac | 240  |
| aaatacgcac  | gcaactgtgt  | tgtaggttac | atcggcgaac | gttgccagta | tcgcgacctg | 300  |
| aaatggtggg  | aactgcgtaa  | ggcggccgcc | cctgcaccga | acatggagaa | cacaacatca | 360  |
| ggattcctag  | gacccctgct  | cgtgttacag | gcgggggttt | tcttgttgac | aagaatcctc | 420  |
| acaataccac  | agagtctaga  | ctcgtggtgg | acttctctca | atcttctagg | gggagcacc  | 480  |
| acgtgtcctg  | gccaaaattc  | gcagtcacca | acctccaatc | actcaccaac | ctcttgtcct | 540  |
| ccaatttgct  | ctggctatcg  | ctggatgtgt | ctgcggcggt | ttatcatatt | cctcttcac  | 600  |
| ctgctgctat  | gcctcatctt  | cttgttggtt | cttctggact | accaaggtat | gttgcccgtt | 660  |
| tgtcctctac  | ttccaggaac  | atcaaccacc | agcacggggc | catgcaagac | ctgcacgatt | 720  |
| cctgctcaag  | gaacctctat  | gtttccctct | tgttgctgta | caaaaccttc | ggacggaaac | 780  |
| tgcacttgta  | ttcccatccc  | atcatcctgg | gctttcgcaa | gattcctatg | ggagtgggcc | 840  |
| tcagtccggt  | tctcctggct  | cagtttacta | gtgccatttg | ttcagtgggt | cgtagggcct | 900  |
| tccccactg   | tttggctttc  | agttatatgg | atgatgtggg | attggggggc | aagtctgtac | 960  |
| aacatcttga  | gtcccttttt  | acctctatta | ccaattttct | tttgtctttg | ggtatacatt | 1020 |

<210> 87

<211> 340

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially  
synthesized sequence

<400> 87

## Sequence Listing.txt

Met Gly Thr Asn Leu Ser Val Pro Asn Pro Leu Gly Phe Phe Pro Asp  
 1 5 10 15  
 His Gln Leu Asp Pro Ala Phe Gly Ala Asn Ser Asn Asn Pro Asp Trp  
 20 25 30  
 Asp Phe Asn Pro Asn Lys Asp Gln Trp Pro Glu Ala Asn Gln Val Gly  
 35 40 45  
 Ala Gly Gly Arg Met Asn Ser Asp Ser Glu Cys Pro Leu Ser His Asp  
 50 55 60  
 Gly Tyr Cys Leu His Asp Gly Val Cys Met Tyr Ile Glu Ala Leu Asp  
 65 70 75 80  
 Lys Tyr Ala Cys Asn Cys Val Val Gly Tyr Ile Gly Glu Arg Cys Gln  
 85 90 95  
 Tyr Arg Asp Leu Lys Trp Trp Glu Leu Arg Lys Ala Ala Ala Pro Ala  
 100 105 110  
 Pro Asn Met Glu Asn Thr Thr Ser Gly Phe Leu Gly Pro Leu Leu Val  
 115 120 125  
 Leu Gln Ala Gly Phe Phe Leu Leu Thr Arg Ile Leu Thr Ile Pro Gln  
 130 135 140  
 Ser Leu Asp Ser Trp Trp Thr Ser Leu Asn Phe Leu Gly Gly Ala Pro  
 145 150 155 160  
 Thr Cys Pro Gly Gln Asn Ser Gln Ser Pro Thr Ser Asn His Ser Pro  
 165 170 175  
 Thr Ser Cys Pro Pro Ile Cys Pro Gly Tyr Arg Trp Met Cys Leu Arg  
 180 185 190  
 Arg Phe Ile Ile Phe Leu Phe Ile Leu Leu Leu Cys Leu Ile Phe Leu  
 195 200 205  
 Leu Val Leu Leu Asp Tyr Gln Gly Met Leu Pro Val Cys Pro Leu Leu  
 210 215 220  
 Pro Gly Thr Ser Thr Thr Ser Thr Gly Pro Cys Lys Thr Cys Thr Ile  
 225 230 235 240  
 Pro Ala Gln Gly Thr Ser Met Phe Pro Ser Cys Cys Cys Thr Lys Pro  
 245 250 255  
 Ser Asp Gly Asn Cys Thr Cys Ile Pro Ile Pro Ser Ser Trp Ala Phe  
 260 265 270  
 Ala Arg Phe Leu Trp Glu Trp Ala Ser Val Arg Phe Ser Trp Leu Ser  
 275 280 285  
 Leu Leu Val Pro Phe Val Gln Trp Phe Val Gly Leu Ser Pro Thr Val  
 290 295 300  
 Trp Leu Ser Val Ile Trp Met Met Trp Tyr Trp Gly Pro Ser Leu Tyr  
 305 310 315 320  
 Asn Ile Leu Ser Pro Phe Leu Pro Leu Leu Pro Ile Phe Phe Cys Leu  
 325 330 335

# Sequence Listing.txt

Trp Val Tyr Ile  
340

<210> 88  
<211> 1020  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Artificially  
synthesized sequence

<400> 88  
atggggacga atcttttctgt tcccaatcct ctgggattct ttcccgatca ccagttggac 60  
cctgcgttcg gagccaactc aaacaatcca gattgggact tcaaccccaa caaggatcaa 120  
tggccagagg caaatcaggt aggagcgggc ggccgcatga actctgattc cgaatgcccg 180  
ctgtctcatg acggttactg cctgcatgat ggcgtatgca tgtacatcga agctctggac 240  
aaatacgcat gcaactgtgt tgtaggttac atcggcgaac gttgccagta tcgcgacctg 300  
aaatgggtggg aactgcgtaa ggcgggccgc cctgcaccga acatggagaa cacaacatca 360  
ggattcctag gacccctgct cgtgttacag gcgggggttt tcttggtgac aagaatcctc 420  
acaataccac agagtctaga ctctgtgttg acttctctca attttctagg gggagcacc 480  
acgtgtcctg gccaaaattc gcagtcacca acctccaatc actcaccaac ctcttgcct 540  
ccaatttgtc ctggctatcg ctggatgtgt ctgcggcggt ttatcatatt cctcttcac 600  
ctgtgtctat gcctcatctt ctgtgttggt ctctctggact accaaggat gttgcccgtt 660  
tgtcctctac ttccaggaac atcaaccacc agcacggggc catgcaagac ctgcacgatt 720  
cctgctcgag gaacctctat gtttccctct tgttgctgta caaaccttc ggacggaaac 780  
tgcacttgta ttcccatccc atcatcctgg gctttcgcaa gattcctatg ggagtgggccc 840  
tcagtccgtt tctcctggct cagtttacta gtgccatttg ttcagtgggt cgtagggcct 900  
tccccactg tttggctttc agttatatgg atgatgtggg attggggggc aagtctgtac 960  
aacatcttga gtcccttttt acctctatta ccaattttct tttgtctttg ggtatacat 1020

<210> 89  
<211> 340  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Artificially  
synthesized sequence

<400> 89  
Met Gly Thr Asn Leu Ser Val Pro Asn Pro Leu Gly Phe Phe Pro Asp  
1 5 10 15  
His Gln Leu Asp Pro Ala Phe Gly Ala Asn Ser Asn Asn Pro Asp Trp  
20 25 30  
Asp Phe Asn Pro Asn Lys Asp Gln Trp Pro Glu Ala Asn Gln Val Gly  
35 40 45  
Ala Gly Gly Arg Met Asn Ser Asp Ser Glu Cys Pro Leu Ser His Asp  
50 55 60  
Gly Tyr Cys Leu His Asp Gly Val Cys Met Tyr Ile Glu Ala Leu Asp  
65 70 75 80  
Lys Tyr Ala Cys Asn Cys Val Val Gly Tyr Ile Gly Glu Arg Cys Gln  
85 90 95  
Tyr Arg Asp Leu Lys Trp Trp Glu Leu Arg Lys Ala Ala Ala Pro Ala  
100 105 110



# Sequence Listing.txt

Pro Asn Met Glu Asn Thr Thr Ser Gly Phe Leu Gly Pro Leu Leu Val  
115 120  
Leu Gln Ala Gly Phe Phe Leu Leu Thr Arg Ile Leu Thr Ile Pro Gln  
130 135 140  
Ser Leu Asp Ser Trp Trp Thr Ser Leu Asn Phe Leu Gly Gly Ala Pro  
145 150 155 160  
Thr Cys Pro Gly Gln Asn Ser Gln Ser Pro Thr Ser Asn His Ser Pro  
165 170 175  
Thr Ser Cys Pro Pro Ile Cys Pro Gly Tyr Arg Trp Met Cys Leu Arg  
180 185 190  
Arg Phe Ile Ile Phe Leu Phe Ile Leu Leu Leu Cys Leu Ile Phe Leu  
195 200 205  
Leu Val Leu Leu Asp Tyr Gln Gly Met Leu Pro Val Cys Pro Leu Leu  
210 215 220  
Pro Gly Thr Ser Thr Thr Ser Thr Gly Pro Cys Lys Thr Cys Thr Ile  
225 230 235 240  
Pro Ala Arg Gly Thr Ser Met Phe Pro Ser Cys Cys Cys Thr Lys Pro  
245 250 255  
Ser Asp Gly Asn Cys Thr Cys Ile Pro Ile Pro Ser Ser Trp Ala Phe  
260 265 270  
Ala Arg Phe Leu Trp Glu Trp Ala Ser Val Arg Phe Ser Trp Leu Ser  
275 280 285  
Leu Leu Val Pro Phe Val Gln Trp Phe Val Gly Leu Ser Pro Thr Val  
290 295 300  
Trp Leu Ser Val Ile Trp Met Met Trp Tyr Trp Gly Pro Ser Leu Tyr  
305 310 315 320  
Asn Ile Leu Ser Pro Phe Leu Pro Leu Leu Pro Ile Phe Phe Cys Leu  
325 330 335  
Trp Val Tyr Ile  
340

<210> 90

<211> 1020

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially  
synthesized sequence

<400> 90

atggggacga atctttctgt tccaatcct ctgggattct ttcccgatca ccagttggac 60  
cctgcgttcg gagccaactc aaacaatcca gattgggact tcaaccccaa caaggatcaa 120  
tgccagagg caaatcagggt aggagcgggc ggccgcatga actctgattc cgaatgcccg 180  
ctgtctcatg acggttactg cctgcatgat ggcgtatgca tgtacatcga agctctggac 240  
aaatacgcgt gcaactgtgt tgtaggttac atcggcgaac gttgccagta tcgcgacctg 300  
aaatggtggg aactgcgtaa ggcggccgcc cctgcaccga acatggagaa cacaacatca 360

# Sequence Listing.txt

```

ggattcctag gacccctgct cgtgttacag gcgggggttt tcttggtgac aagaatcctc 420
acaataccac agagtctaga ctggtggtgg acttctctca attttctagg gggagcacc 480
acgtgtcctg gccaaaattc gcagtcacca acctccaatc actcaccaac ctcttgcct 540
ccaatttgtc ctggctatcg ctggatgtgt ctgcggcggt ttatcatatt cctcttcac 600
ctgctgctat gcctcatctt ctgtttggtt cttctggact accaaggat gttgcccgtt 660
tgtcctctac ttccaggaac atcaaccacc agcacggggc catgcaagac ctgcacgatt 720
cctgctcaag gaacctctat gtttccctct tgttgctgta caaaaccttc ggacagaaac 780
tgcacttgta ttcccatccc atcatcctgg gctttcgcaa gattcctatg ggagtgggcc 840
tcagtccgtt tctcctggct cagtttacta gtgccatttg ttcagtgggt cgtagggcct 900
tccccactg tttggctttc agttatatgg atgatgtggg attgggggcc aagtctgtac 960
aacatcttga gtcccttttt acctctatta ccaattttct tttgtctttg ggtatacatt 1020

```

<210> 91

<211> 340

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 91

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Met Gly Thr Asn Leu Ser Val Pro Asn Pro Leu Gly Phe Phe Pro Asp
 1          5          10          15
His Gln Leu Asp Pro Ala Phe Gly Ala Asn Ser Asn Asn Pro Asp Trp
          20          25          30
Asp Phe Asn Pro Asn Lys Asp Gln Trp Pro Glu Ala Asn Gln Val Gly
          35          40          45
Ala Gly Gly Arg Met Asn Ser Asp Ser Glu Cys Pro Leu Ser His Asp
          50          55          60
Gly Tyr Cys Leu His Asp Gly Val Cys Met Tyr Ile Glu Ala Leu Asp
          65          70          75          80
Lys Tyr Ala Cys Asn Cys Val Val Gly Tyr Ile Gly Glu Arg Cys Gln
          85          90          95
Tyr Arg Asp Leu Lys Trp Trp Glu Leu Arg Lys Ala Ala Ala Pro Ala
          100          105          110
Pro Asn Met Glu Asn Thr Thr Ser Gly Phe Leu Gly Pro Leu Leu Val
          115          120          125
Leu Gln Ala Gly Phe Phe Leu Leu Thr Arg Ile Leu Thr Ile Pro Gln
          130          135          140
Ser Leu Asp Ser Trp Trp Thr Ser Leu Asn Phe Leu Gly Gly Ala Pro
          145          150          155          160
Thr Cys Pro Gly Gln Asn Ser Gln Ser Pro Thr Ser Asn His Ser Pro
          165          170          175
Thr Ser Cys Pro Pro Ile Cys Pro Gly Tyr Arg Trp Met Cys Leu Arg
          180          185          190
Arg Phe Ile Ile Phe Leu Phe Ile Leu Leu Leu Cys Leu Ile Phe Leu
          195          200          205
Leu Val Leu Leu Asp Tyr Gln Gly Met Leu Pro Val Cys Pro Leu Leu

```

Sequence Listing.txt

210

215

220

Pro Gly Thr Ser Thr Thr Ser Thr Gly Pro Cys Lys Thr Cys Thr Ile  
 225 230 235 240  
 Pro Ala Gln Gly Thr Ser Met Phe Pro Ser Cys Cys Cys Thr Lys Pro  
 245 250 255  
 Ser Asp Arg Asn Cys Thr Cys Ile Pro Ile Pro Ser Ser Trp Ala Phe  
 260 265 270  
 Ala Arg Phe Leu Trp Glu Trp Ala Ser Val Arg Phe Ser Trp Leu Ser  
 275 280 285  
 Leu Leu Val Pro Phe Val Gln Trp Phe Val Gly Leu Ser Pro Thr Val  
 290 295 300  
 Trp Leu Ser Val Ile Trp Met Met Trp Tyr Trp Gly Pro Ser Leu Tyr  
 305 310 315 320  
 Asn Ile Leu Ser Pro Phe Leu Pro Leu Leu Pro Ile Phe Phe Cys Leu  
 325 330 335  
 Trp Val Tyr Ile  
 340

<210> 92

<211> 1020

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially  
 synthesized sequence

<400> 92

|            |             |            |            |            |            |      |
|------------|-------------|------------|------------|------------|------------|------|
| atggggacga | atcttttctgt | tcccaatcct | ctgggattct | ttcccgatca | ccagttggac | 60   |
| cctgcgttcg | gagccaactc  | aaacaatcca | gattgggact | tcaaccccaa | caaggatcaa | 120  |
| tggccagagg | caaatcaggt  | aggagcgggc | ggccgcatga | actctgattc | cgaatgcccg | 180  |
| ctgtctcatg | acggttactg  | cctgcatgat | ggcgtatgca | tgtacatcga | agctctggac | 240  |
| aaatacgcac | gcaactgtgt  | tgtaggttac | atcggcgaac | gttgccagta | tcgcgacctg | 300  |
| aaatggtggg | aactgcgtaa  | ggcggccgcc | cctgcaccga | acatggagaa | cacaacatca | 360  |
| ggattcctag | gacccctgct  | cgtgttacag | gcggggtttt | tcttgttgac | aagaatcctc | 420  |
| acaataccac | agagtctaga  | ctcgtggtgg | acttctctca | atcttctagg | gggagcacc  | 480  |
| acgtgtcctg | gccaaaattc  | gcagtcccca | acctccaatc | actcaccaac | ctcttgtcct | 540  |
| ccaatttgtc | ctggctatcg  | ctggatgtgt | ctgcggcggt | ttatcatatt | cctcttcac  | 600  |
| ctgctgctat | gcctcatctt  | cttgttgggt | cttctggact | accaaggtat | gttgcccgtt | 660  |
| tgtcctctac | ttccaggaac  | atcaaccacc | agcacggggc | catgcaagac | ctgcacgatt | 720  |
| cctgctcgag | gaacctctat  | gtttccctct | tgttgctgta | caaaaccttc | ggacagaaac | 780  |
| tgcacttgta | ttcccatccc  | atcatcctgg | gctttcgcaa | gattcctatg | ggagtggg   | 840  |
| tcagtccggt | tctcctggct  | cagtttacta | gtgccatttg | ttcagtgggt | cgtagggc   | 900  |
| tccccactg  | tttggtttc   | agttatatgg | atgatgtgg  | attggggg   | aagtctgtac | 960  |
| aacatcttga | gtcccttttt  | acctctatta | ccaattttct | tttgctttg  | ggtatacatt | 1020 |

<210> 93

<211> 340

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially

## Sequence Listing.txt

## synthesized sequence

&lt;400&gt; 93

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Met Gly Thr Asn Leu Ser Val Pro Asn Pro Leu Gly Phe Phe Pro Asp
 1      5      10
His Gln Leu Asp Pro Ala Phe Gly Ala Asn Ser Asn Asn Pro Asp Trp
      20      25      30
Asp Phe Asn Pro Asn Lys Asp Gln Trp Pro Glu Ala Asn Gln Val Gly
      35      40      45
Ala Gly Gly Arg Met Asn Ser Asp Ser Glu Cys Pro Leu Ser His Asp
      50      55      60
Gly Tyr Cys Leu His Asp Gly Val Cys Met Tyr Ile Glu Ala Leu Asp
      65      70      75      80
Lys Tyr Ala Cys Asn Cys Val Val Gly Tyr Ile Gly Glu Arg Cys Gln
      85      90      95
Tyr Arg Asp Leu Lys Trp Trp Glu Leu Arg Lys Ala Ala Ala Pro Ala
      100      105      110
Pro Asn Met Glu Asn Thr Thr Ser Gly Phe Leu Gly Pro Leu Leu Val
      115      120      125
Leu Gln Ala Gly Phe Phe Leu Leu Thr Arg Ile Leu Thr Ile Pro Gln
      130      135      140
Ser Leu Asp Ser Trp Trp Thr Ser Leu Asn Phe Leu Gly Gly Ala Pro
      145      150      155      160
Thr Cys Pro Gly Gln Asn Ser Gln Ser Pro Thr Ser Asn His Ser Pro
      165      170      175
Thr Ser Cys Pro Pro Ile Cys Pro Gly Tyr Arg Trp Met Cys Leu Arg
      180      185      190
Arg Phe Ile Ile Phe Leu Phe Ile Leu Leu Leu Cys Leu Ile Phe Leu
      195      200      205
Leu Val Leu Leu Asp Tyr Gln Gly Met Leu Pro Val Cys Pro Leu Leu
      210      215      220
Pro Gly Thr Ser Thr Thr Ser Thr Gly Pro Cys Lys Thr Cys Thr Ile
      225      230      235      240
Pro Ala Arg Gly Thr Ser Met Phe Pro Ser Cys Cys Cys Thr Lys Pro
      245      250      255
Ser Asp Arg Asn Cys Thr Cys Ile Pro Ile Pro Ser Ser Trp Ala Phe
      260      265      270
Ala Arg Phe Leu Trp Glu Trp Ala Ser Val Arg Phe Ser Trp Leu Ser
      275      280      285
Leu Leu Val Pro Phe Val Gln Trp Phe Val Gly Leu Ser Pro Thr Val
      290      295      300
Trp Leu Ser Val Ile Trp Met Met Trp Tyr Trp Gly Pro Ser Leu Tyr
      305      310      315      320

```

# Sequence Listing.txt

Asn Ile Leu Ser Pro Phe Leu Pro Leu Leu Pro Ile Phe Phe Cys Leu  
325 330 335

Trp Val Tyr Ile  
340

<210> 94  
<211> 879  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Artificially  
synthesized sequence

<400> 94  
atgggggacga atcttttctgt tcccaatcct ctgggattct ttcccgatca ccagttggac 60  
cctgcgttcg gagccaactc aaacaatcca gattgggact tcaaccccaa caaggatcaa 120  
tggccagagg caaatcaggt aggagcgggc ggccgctgga gccaccgca gttcgaaaaa 180  
gcggccgccc ctgcaccgaa catggagaac acaacatcag gattcctagg acccctgctc 240  
gtgttacagg cggggtttt ctgttgaca agaatcctca caataccaca gagtctagac 300  
tcgtggtgga ctctctcaa ttttctaggg ggagcaccca cgtgtcctgg ccaaaattcg 360  
cagtccccaa cctccaatca ctaccaacc tcttgtcctc caatttgctc tggctatcgc 420  
tggatgtgtc tgcggcgttt tatcatattc ctcttcattc tgctgctatg cctcatcttc 480  
ttgttggttc ttctggacta ccaaggatg ttgcccgttt gtcctctact tccaggaaca 540  
tcaaccacca gcacggggcc atgcaagacc tgcacgattc ctgctcaagg aacctctatg 600  
tttccctctt gttgctgtac aaaaccttcg gacggaaact gcacttgat tcccatccca 660  
tcatcctggg ctctcgcaag attcctatgg gagtgggcct cagtcctgtt ctcttggtc 720  
agtttactag tgccatttgt tcagtgggtc gtagggcctt cccccactgt ttggccttca 780  
gttatatgga tgatgtggta ttgggggcca agtctgtaca acatcttgag tcccttttta 840  
cctctattac caattttctt ttgtctttgg gtatacatt 879

<210> 95  
<211> 293  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Artificially  
synthesized sequence

<400> 95  
Met Gly Thr Asn Leu Ser Val Pro Asn Pro Leu Gly Phe Phe Pro Asp  
1 5 10 15  
His Gln Leu Asp Pro Ala Phe Gly Ala Asn Ser Asn Asn Pro Asp Trp  
20 25 30  
Asp Phe Asn Pro Asn Lys Asp Gln Trp Pro Glu Ala Asn Gln Val Gly  
35 40 45  
Ala Gly Gly Arg Trp Ser His Pro Gln Phe Glu Lys Ala Ala Ala Pro  
50 55 60  
Ala Pro Asn Met Glu Asn Thr Thr Ser Gly Phe Leu Gly Pro Leu Leu  
65 70 75 80  
Val Leu Gln Ala Gly Phe Phe Leu Leu Thr Arg Ile Leu Thr Ile Pro  
85 90 95  
Gln Ser Leu Asp Ser Trp Trp Thr Ser Leu Asn Phe Leu Gly Gly Ala  
Page 61

## Sequence Listing.txt

100

105

110

Pro Thr Cys Pro Gly Gln Asn Ser Gln Ser Pro Thr Ser Asn His Ser  
 115 120 125  
 Pro Thr Ser Cys Pro Pro Ile Cys Pro Gly Tyr Arg Trp Met Cys Leu  
 130 135 140  
 Arg Arg Phe Ile Ile Phe Leu Phe Ile Leu Leu Leu Cys Leu Ile Phe  
 145 150 155 160  
 Leu Leu Val Leu Leu Asp Tyr Gln Gly Met Leu Pro Val Cys Pro Leu  
 165 170 175  
 Leu Pro Gly Thr Ser Thr Thr Ser Thr Gly Pro Cys Lys Thr Cys Thr  
 180 185 190  
 Ile Pro Ala Gln Gly Thr Ser Met Phe Pro Ser Cys Cys Cys Thr Lys  
 195 200 205  
 Pro Ser Asp Gly Asn Cys Thr Cys Ile Pro Ile Pro Ser Ser Trp Ala  
 210 215 220  
 Phe Ala Arg Phe Leu Trp Glu Trp Ala Ser Val Arg Phe Ser Trp Leu  
 225 230 235 240  
 Ser Leu Leu Val Pro Phe Val Gln Trp Phe Val Gly Leu Ser Pro Thr  
 245 250 255  
 Val Trp Leu Ser Val Ile Trp Met Met Trp Tyr Trp Gly Pro Ser Leu  
 260 265 270  
 Tyr Asn Ile Leu Ser Pro Phe Leu Pro Leu Leu Pro Ile Phe Phe Cys  
 275 280 285  
 Leu Trp Val Tyr Ile  
 290

&lt;210&gt; 96

&lt;211&gt; 879

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence:Artificially synthesized sequence

&lt;400&gt; 96

```

atggggacga atctttctgt tccaatcct ctgggattct ttcccgatca ccagttggac 60
cctgcgttcg gagccaactc aaacaatcca gattgggact tcaaccccaa caaggatcaa 120
tggccagagg caaatcaggt aggagcgggc ggccgctgga gccaccgca gttcgaaaaa 180
gcggccgccc ctgcaccgaa catggagaac acaacatcag gattcctagg acccctgctc 240
gtgttacagg cggggttttt cttgttgaca agaatcctca caataccaca gagtctagac 300
tcgtggtgga ctctctcaa tttctaggg ggagcaccca cgtgtcctgg ccaaaattcg 360
cagtcctcaa cctccaatca ttcaccaacc tcttgtcctc caatttgcc tggctatcgc 420
tggatgtgtc tgcggcggtt tatcatattc ctcttcattc tgctgctatg cctcatcttc 480
ttgttggttc ttctggacta ccaaggtatg ttgccggtt gtcctctact tccaggaaca 540
tcaaccacca gcacggggcc atgcaagacc tgcacgattc ctgctcgagg aacctctatg 600
tttccctctt gttgctgtac aaaaccttcg gacggaaact gcacttgat tcccatccca 660
tcattctggg ctttcgcaag attcctatgg gagtgggctt cagtcggtt ctcctggctc 720
agtttactag tgccatttgt tcagtggttc gtagggttt cccccactgt ttggctttca 780
gttatatgga tgatgtggtt ttgggggcca agtctgtaca acatcttgag tcccttttta 840

```

cctctattac caattttctt ttgtctttgg gtatacatt

879

&lt;210&gt; 97

&lt;211&gt; 293

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence:Artificially  
synthesized sequence

&lt;400&gt; 97

Met Gly Thr Asn Leu Ser Val Pro Asn Pro Leu Gly Phe Phe Pro Asp  
1 5 10 15His Gln Leu Asp Pro Ala Phe Gly Ala Asn Ser Asn Asn Pro Asp Trp  
20 25 30Asp Phe Asn Pro Asn Lys Asp Gln Trp Pro Glu Ala Asn Gln Val Gly  
35 40 45Ala Gly Gly Arg Trp Ser His Pro Gln Phe Glu Lys Ala Ala Ala Pro  
50 55 60Ala Pro Asn Met Glu Asn Thr Thr Ser Gly Phe Leu Gly Pro Leu Leu  
65 70 75 80Val Leu Gln Ala Gly Phe Phe Leu Leu Thr Arg Ile Leu Thr Ile Pro  
85 90 95Gln Ser Leu Asp Ser Trp Trp Thr Ser Leu Asn Phe Leu Gly Gly Ala  
100 105 110Pro Thr Cys Pro Gly Gln Asn Ser Gln Ser Pro Thr Ser Asn His Ser  
115 120 125Pro Thr Ser Cys Pro Pro Ile Cys Pro Gly Tyr Arg Trp Met Cys Leu  
130 135 140Arg Arg Phe Ile Ile Phe Leu Phe Ile Leu Leu Cys Leu Ile Phe  
145 150 155 160Leu Leu Val Leu Leu Asp Tyr Gln Gly Met Leu Pro Val Cys Pro Leu  
165 170 175Leu Pro Gly Thr Ser Thr Thr Ser Thr Gly Pro Cys Lys Thr Cys Thr  
180 185 190Ile Pro Ala Arg Gly Thr Ser Met Phe Pro Ser Cys Cys Cys Thr Lys  
195 200 205Pro Ser Asp Gly Asn Cys Thr Cys Ile Pro Ile Pro Ser Ser Trp Ala  
210 215 220Phe Ala Arg Phe Leu Trp Glu Trp Ala Ser Val Arg Phe Ser Trp Leu  
225 230 235 240Ser Leu Leu Val Pro Phe Val Gln Trp Phe Val Gly Leu Ser Pro Thr  
245 250 255Val Trp Leu Ser Val Ile Trp Met Met Trp Tyr Trp Gly Pro Ser Leu  
260 265 270

# Sequence Listing.txt

Tyr Asn Ile Leu Ser Pro Phe Leu Pro Leu Leu Pro Ile Phe Phe Cys  
275 280 285

Leu Trp Val Tyr Ile  
290

<210> 98

<211> 879

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 98

```
atggggacga atctttctgt tccaatcct ctgggattct ttcccgatca ccagttggac 60
cctgcgttcg gagccaactc aaacaatcca gattgggact tcaaccccaa caaggatcaa 120
tggccagagg caaatcaggt aggagcgggc ggccgctgga gccaccgcga gttcgaaaaa 180
gcggccgccc ctgcaccgaa catggagaac acaacatcag gattcctagg acccctgctc 240
gtgttacagg cgggggtttt cttgttgaca agaatcctca caataccaca gagtctagac 300
tcgtggtgga ctctctctca ttttctaggg ggagcaccca cgtgtcctgg ccaaaattcg 360
cagtcccaa cctccaatca ctcaccaacc tcttgtcctc caatttgacc tggctatcgc 420
tggatgtgtc tgcggcggtt tatcatattc ctcttcatcc tgctgctatg cctcatcttc 480
ttgttggttc ttctggacta ccaaggtatg ttgccggtt gtctctact tccaggaaca 540
tcaaccacca gcacggggcc atgcaagacc tgcacgattc ctgctcaagg aacctctatg 600
tttccctctt gttgctgtac aaaaccttcg gacagaaact gcacttgat tcccatccca 660
tcacctctgg ctttcgcaag attcctatgg gagtgggcct cagtccgttt ctcttggtc 720
agtttactag tgccatttgt tcagtgggtc gtagggttt ccccaactgt ttggctttca 780
gttatatgga tgatgtggtt ttgggggcca agtctgtaca acatcttgag tcccttttta 840
cctctattac caattttctt ttgtctttgg gtatacatt 879
```

<210> 99

<211> 293

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 99

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Met Gly Thr Asn Leu Ser Val Pro Asn Pro Leu Gly Phe Phe Pro Asp
 1 5 10 15
His Gln Leu Asp Pro Ala Phe Gly Ala Asn Ser Asn Asn Pro Asp Trp
 20 25 30
Asp Phe Asn Pro Asn Lys Asp Gln Trp Pro Glu Ala Asn Gln Val Gly
 35 40 45
Ala Gly Gly Arg Trp Ser His Pro Gln Phe Glu Lys Ala Ala Ala Pro
 50 55 60
Ala Pro Asn Met Glu Asn Thr Thr Ser Gly Phe Leu Gly Pro Leu Leu
 65 70 75 80
Val Leu Gln Ala Gly Phe Phe Leu Leu Thr Arg Ile Leu Thr Ile Pro
 85 90 95
```



Sequence Listing.txt

Gln Ser Leu Asp Ser Trp Trp Thr Ser Leu Asn Phe Leu Gly Gly Ala  
 100 105 110  
 Pro Thr Cys Pro Gly Gln Asn Ser Gln Ser Pro Thr Ser Asn His Ser  
 115 120 125  
 Pro Thr Ser Cys Pro Pro Ile Cys Pro Gly Tyr Arg Trp Met Cys Leu  
 130 135 140  
 Arg Arg Phe Ile Ile Phe Leu Phe Ile Leu Leu Leu Cys Leu Ile Phe  
 145 150 155 160  
 Leu Leu Val Leu Leu Asp Tyr Gln Gly Met Leu Pro Val Cys Pro Leu  
 165 170 175  
 Leu Pro Gly Thr Ser Thr Thr Ser Thr Gly Pro Cys Lys Thr Cys Thr  
 180 185 190  
 Ile Pro Ala Gln Gly Thr Ser Met Phe Pro Ser Cys Cys Cys Thr Lys  
 195 200 205  
 Pro Ser Asp Arg Asn Cys Thr Cys Ile Pro Ile Pro Ser Ser Trp Ala  
 210 215 220  
 Phe Ala Arg Phe Leu Trp Glu Trp Ala Ser Val Arg Phe Ser Trp Leu  
 225 230 235 240  
 Ser Leu Leu Val Pro Phe Val Gln Trp Phe Val Gly Leu Ser Pro Thr  
 245 250 255  
 Val Trp Leu Ser Val Ile Trp Met Met Trp Tyr Trp Gly Pro Ser Leu  
 260 265 270  
 Tyr Asn Ile Leu Ser Pro Phe Leu Pro Leu Leu Pro Ile Phe Phe Cys  
 275 280 285  
 Leu Trp Val Tyr Ile  
 290

<210> 100

<211> 879

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 100

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| atggggacga | atctttctgt | tcccaatcct | ctgggattct | ttcccgatca | ccagttggac | 60  |
| cctgcgttcg | gagccaactc | aaacaatcca | gattgggact | tcaaccccaa | caaggatcaa | 120 |
| tggccagagg | caaatcaggt | aggagcgggc | ggccgctgga | gccaccgcga | gttcgaaaaa | 180 |
| gcggccgccc | ctgcaccgaa | catggagaac | acaacatcag | gattcctagg | acccctgctc | 240 |
| gtgttacagg | cggggttttt | cttgttgaca | agaatcctca | caataccaca | gagtctagac | 300 |
| tcgtgggtga | cttctctcaa | ttttctaggg | ggagcaccca | cgtgtcctgg | ccaaaattcg | 360 |
| cagtccccaa | cctccaatca | ctcaccaacc | tcttgtcctc | caatttgtcc | tggctatcgc | 420 |
| tggatgtgtc | tgcggcggtt | tatcatattc | ctcttcatcc | tgctgctatg | cctcatcttc | 480 |
| ttgttggttc | ttctggacta | ccaaggtatg | ttgcccgttt | gtcctctact | tccaggaaca | 540 |
| tcaaccacca | gcacggggcc | atgcaagacc | tgcacgattc | ctgctcgagg | aacctctatg | 600 |
| tttccctctt | gttgctgtac | aaaaccttcg | gacagaaact | gcacttgat  | tcccatccca | 660 |
| tcatcctggg | ctttcgcaag | attcctatgg | gagtgggcct | cagtccgttt | ctcctggctc | 720 |
| agtttactag | tgccatttgt | tcagtgggtc | gtagggcctt | ccccactgt  | ttggctttca | 780 |

Sequence Listing.txt

gttatatgga tgatgtggta ttgggggcca agtctgtaca acatcttgag tcccttttta 840  
cctctattac caattttctt ttgtctttgg gtatacatt 879

<210> 101

<211> 293

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially  
synthesized sequence

<400> 101

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Met | Gly | Thr | Asn | Leu | Ser | Val | Pro | Asn | Pro | Leu | Gly | Phe | Phe | Pro | Asp |
| 1   |     |     |     | 5   |     |     |     | 10  |     |     |     |     |     | 15  |     |
| His | Gln | Leu | Asp | Pro | Ala | Phe | Gly | Ala | Asn | Ser | Asn | Asn | Pro | Asp | Trp |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Asp | Phe | Asn | Pro | Asn | Lys | Asp | Gln | Trp | Pro | Glu | Ala | Asn | Gln | Val | Gly |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Ala | Gly | Gly | Arg | Trp | Ser | His | Pro | Gln | Phe | Glu | Lys | Ala | Ala | Ala | Pro |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Ala | Pro | Asn | Met | Glu | Asn | Thr | Thr | Ser | Gly | Phe | Leu | Gly | Pro | Leu | Leu |
|     | 65  |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |
| Val | Leu | Gln | Ala | Gly | Phe | Phe | Leu | Leu | Thr | Arg | Ile | Leu | Thr | Ile | Pro |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Gln | Ser | Leu | Asp | Ser | Trp | Trp | Thr | Ser | Leu | Asn | Phe | Leu | Gly | Gly | Ala |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Pro | Thr | Cys | Pro | Gly | Gln | Asn | Ser | Gln | Ser | Pro | Thr | Ser | Asn | His | Ser |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Pro | Thr | Ser | Cys | Pro | Pro | Ile | Cys | Pro | Gly | Tyr | Arg | Trp | Met | Cys | Leu |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Arg | Arg | Phe | Ile | Ile | Phe | Leu | Phe | Ile | Leu | Leu | Leu | Cys | Leu | Ile | Phe |
|     | 145 |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |
| Leu | Leu | Val | Leu | Leu | Asp | Tyr | Gln | Gly | Met | Leu | Pro | Val | Cys | Pro | Leu |
|     |     |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |     |
| Leu | Pro | Gly | Thr | Ser | Thr | Thr | Ser | Thr | Gly | Pro | Cys | Lys | Thr | Cys | Thr |
|     |     |     | 180 |     |     |     |     | 185 |     |     |     |     | 190 |     |     |
| Ile | Pro | Ala | Arg | Gly | Thr | Ser | Met | Phe | Pro | Ser | Cys | Cys | Cys | Thr | Lys |
|     |     | 195 |     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |
| Pro | Ser | Asp | Arg | Asn | Cys | Thr | Cys | Ile | Pro | Ile | Pro | Ser | Ser | Trp | Ala |
|     |     | 210 |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     |
| Phe | Ala | Arg | Phe | Leu | Trp | Glu | Trp | Ala | Ser | Val | Arg | Phe | Ser | Trp | Leu |
|     | 225 |     |     |     | 230 |     |     |     |     | 235 |     |     |     |     | 240 |
| Ser | Leu | Leu | Val | Pro | Phe | Val | Gln | Trp | Phe | Val | Gly | Leu | Ser | Pro | Thr |
|     |     |     |     | 245 |     |     |     |     | 250 |     |     |     |     | 255 |     |
| Val | Trp | Leu | Ser | Val | Ile | Trp | Met | Met | Trp | Tyr | Trp | Gly | Pro | Ser | Leu |

260

Tyr Asn Ile Leu Ser Pro Phe Leu Pro Leu Leu Pro Ile Phe Phe Cys  
275 280 285

Leu Trp Val Tyr Ile  
290

<210> 102  
<211> 1167  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Artificially  
synthesized sequence

<400> 102  
atgggagggt ggtcttccaa acctcggaaa ggcattgggga cgaatctttc tgttcccaat 60  
cctctgggat tctttccgga tcaccagttg gacggcggcc gcgcgcaaca cgatgaagcc 120  
gtagacaaca aattcaacaa agaacaacaa aacgcgttct atgagatctt acatttacct 180  
aacttaaacg aagaacaacg aaacgccttc atccaaagtt taaaagatga cccaagccaa 240  
agcgctaacc ttttagcaga agctaaaaag ctaaattgat ctcaggcgcc gaaagtagac 300  
aacaatttca acaaagaaca acaaaacgcg ttctatgaga tcttacattt acctaactta 360  
aacgaagaac aacgaaacgc cttcatccaa agttttaaag atgaccaag ccaaagcgct 420  
aaccttttag cagaagctaa aaagctaaat gatgctcagg cgccgaaagc ggccgcccct 480  
gcaccgaaca tggagaacac aacatcagga ttcttaggac ccctgctcgt gttacaggcg 540  
gggtttttct tgttgacaag aatcctcaca ataccacaga gtctagactc gtggtggact 600  
tctctcaatt ttctaggggg agcaccacag tgtcctggcc aaaattcgca gtccccaacc 660  
tccaatcatt caccaacctc ttgtcctcca attgtcctg gctatcgctg gatgtgtctg 720  
cggcgtttta tcatattcct cttcatcctg ctgctatgcc tcatcttctt gttggttctt 780  
ctggactacc aagggtatgtt gcccgtttgt cctctacttc caggaaacatc aaccaccagc 840  
acggggccat gcaagacctg cacgattcct gctcaaggaa cctctatgtt tccctcttgt 900  
tgctgtacaa aaccttcgga cggaaactgc acttgatttc ccatcccatc atcctgggct 960  
ttcgcaagat tcctatggga gtgggcctca gtccgtttct cctggctcag ttactagtg 1020  
ccatttggtc agtggttcgt agggctttcc cccactgttt ggctttcagt tatatggatg 1080  
atgtgggtatt gggggccaag tctgtacaac atcttgagtc ctttttacc tctattacca 1140  
attttctttt gtctttgggt atacatt 1167

<210> 103  
<211> 389  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Artificially  
synthesized sequence

<400> 103  
Met Gly Gly Trp Ser Ser Lys Pro Arg Lys Gly Met Gly Thr Asn Leu  
1 5 10 15  
Ser Val Pro Asn Pro Leu Gly Phe Phe Pro Asp His Gln Leu Asp Gly  
20 25 30  
Gly Arg Ala Gln His Asp Glu Ala Val Asp Asn Lys Phe Asn Lys Glu  
35 40 45  
Gln Gln Asn Ala Phe Tyr Glu Ile Leu His Leu Pro Asn Leu Asn Glu  
50 55 60

## Sequence Listing.txt

Glu Gln Arg Asn Ala Phe Ile Gln Ser Leu Lys Asp Asp Pro Ser Gln  
 65 70 75 80  
 Ser Ala Asn Leu Leu Ala Glu Ala Lys Lys Leu Asn Asp Ala Gln Ala  
 85 90 95  
 Pro Lys Val Asp Asn Lys Phe Asn Lys Glu Gln Gln Asn Ala Phe Tyr  
 100 105 110  
 Glu Ile Leu His Leu Pro Asn Leu Asn Glu Glu Gln Arg Asn Ala Phe  
 115 120 125  
 Ile Gln Ser Leu Lys Asp Asp Pro Ser Gln Ser Ala Asn Leu Leu Ala  
 130 135 140  
 Glu Ala Lys Lys Leu Asn Asp Ala Gln Ala Pro Lys Ala Ala Ala Pro  
 145 150 155 160  
 Ala Pro Asn Met Glu Asn Thr Thr Ser Gly Phe Leu Gly Pro Leu Leu  
 165 170 175  
 Val Leu Gln Ala Gly Phe Phe Leu Leu Thr Arg Ile Leu Thr Ile Pro  
 180 185 190  
 Gln Ser Leu Asp Ser Trp Trp Thr Ser Leu Asn Phe Leu Gly Gly Ala  
 195 200 205  
 Pro Thr Cys Pro Gly Gln Asn Ser Gln Ser Pro Thr Ser Asn His Ser  
 210 215 220  
 Pro Thr Ser Cys Pro Pro Ile Cys Pro Gly Tyr Arg Trp Met Cys Leu  
 225 230 235 240  
 Arg Arg Phe Ile Ile Phe Leu Phe Ile Leu Leu Leu Cys Leu Ile Phe  
 245 250 255  
 Leu Leu Val Leu Leu Asp Tyr Gln Gly Met Leu Pro Val Cys Pro Leu  
 260 265 270  
 Leu Pro Gly Thr Ser Thr Thr Ser Thr Gly Pro Cys Lys Thr Cys Thr  
 275 280 285  
 Ile Pro Ala Gln Gly Thr Ser Met Phe Pro Ser Cys Cys Cys Thr Lys  
 290 295 300  
 Pro Ser Asp Gly Asn Cys Thr Cys Ile Pro Ile Pro Ser Ser Trp Ala  
 305 310 315 320  
 Phe Ala Arg Phe Leu Trp Glu Trp Ala Ser Val Arg Phe Ser Trp Leu  
 325 330 335  
 Ser Leu Leu Val Pro Phe Val Gln Trp Phe Val Gly Leu Ser Pro Thr  
 340 345 350  
 Val Trp Leu Ser Val Ile Trp Met Met Trp Tyr Trp Gly Pro Ser Leu  
 355 360 365  
 Tyr Asn Ile Leu Ser Pro Phe Leu Pro Leu Leu Pro Ile Phe Phe Cys  
 370 375 380  
 Leu Trp Val Tyr Ile  
 385

# Sequence Listing.txt

<210> 104  
 <211> 1167  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 104  
 atgggagggt ggtcttccaa acctcggaaa ggcatgggga cgaatctttc tgttcccaat 60  
 cctctgggat tctttcccga tcaccagttg gacggcggcc gcgcgcaaca cgatgaagcc 120  
 gtagacaaca aattcaacaa agaacaacaa aacgcgttct atgagatctt acatttacct 180  
 aacttaaacg aagaacaacg aaacgccttc atccaaagtt taaaagatga cccaagccaa 240  
 agcgctaacc ttttagcaga agctaaaaag cttaaagatg ctcaggcgcc gaaagtagac 300  
 aacaaattca acaaagaaca acaaaacgcg ttctatgaga tcttacattt acctaactta 360  
 aacgaagaac aacgaaacgc cttcatccaa agtttaaaaag atgaccaag ccaaagcgct 420  
 aaccttttag cagaagctaa aaagctaaat gatgctcagg cgccgaaagc ggccgcccct 480  
 gcaccgaaca tggagaacac aacatcagga ttcttaggac ccctgctcgt gttacaggcg 540  
 ggggttttct tgttgacaag aatcctcaca ataccacaga gtctagactc gtggtggact 600  
 tctctcaatt ttctaggggg agcaccacg tgtcctggcc aaaattcgca gtccccaacc 660  
 tccaatcaact caccaacctc ttgtcctcca atttgtcctg gctatcgctg gatgtgtctg 720  
 cggcgtttta tcatattcct cttcatcctg ctgctatgcc tcatcttctt gttggttctt 780  
 ctggactacc aaggtatgtt gcccgtttgt cctctacttc caggaacatc aaccaccagc 840  
 acggggccat gcaagacctg cacgattcct gctcgaggaa cctctatgtt tccctcttgt 900  
 tgctgtacaa aaccttcgga cggaaactgc acttgatttc ccatcccatc atcctgggct 960  
 ttcgcaagat tcctatggga gtgggcctca gtccgtttct cctggctcag ttactagtgt 1020  
 ccatttggtc agtggttcgt agggctttcc cccactgttt ggctttcagt tatatggatg 1080  
 atgtggtatt gggggccaag tctgtacaac atcttgagtc cttttttacc tctattacca 1140  
 attttctttt gcttttgggt atacatt 1167

<210> 105  
 <211> 389  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 105  
 Met Gly Gly Trp Ser Ser Lys Pro Arg Lys Gly Met Gly Thr Asn Leu  
 1 5 10 15  
 Ser Val Pro Asn Pro Leu Gly Phe Phe Pro Asp His Gln Leu Asp Gly  
 20 25 30  
 Gly Arg Ala Gln His Asp Glu Ala Val Asp Asn Lys Phe Asn Lys Glu  
 35 40 45  
 Gln Gln Asn Ala Phe Tyr Glu Ile Leu His Leu Pro Asn Leu Asn Glu  
 50 55 60  
 Glu Gln Arg Asn Ala Phe Ile Gln Ser Leu Lys Asp Asp Pro Ser Gln  
 65 70 75 80  
 Ser Ala Asn Leu Leu Ala Glu Ala Lys Lys Leu Asn Asp Ala Gln Ala  
 85 90 95  
 Pro Lys Val Asp Asn Lys Phe Asn Lys Glu Gln Gln Asn Ala Phe Tyr  
 100 105 110

Sequence Listing.txt

Glu Ile Leu His Leu Pro Asn Leu Asn Glu Glu Gln Arg Asn Ala Phe  
 115 120 125  
 Ile Gln Ser Leu Lys Asp Asp Pro Ser Gln Ser Ala Asn Leu Leu Ala  
 130 135 140  
 Glu Ala Lys Lys Leu Asn Asp Ala Gln Ala Pro Lys Ala Ala Ala Pro  
 145 150 155 160  
 Ala Pro Asn Met Glu Asn Thr Thr Ser Gly Phe Leu Gly Pro Leu Leu  
 165 170 175  
 Val Leu Gln Ala Gly Phe Phe Leu Leu Thr Arg Ile Leu Thr Ile Pro  
 180 185 190  
 Gln Ser Leu Asp Ser Trp Trp Thr Ser Leu Asn Phe Leu Gly Gly Ala  
 195 200 205  
 Pro Thr Cys Pro Gly Gln Asn Ser Gln Ser Pro Thr Ser Asn His Ser  
 210 215 220  
 Pro Thr Ser Cys Pro Pro Ile Cys Pro Gly Tyr Arg Trp Met Cys Leu  
 225 230 235 240  
 Arg Arg Phe Ile Ile Phe Leu Phe Ile Leu Leu Leu Cys Leu Ile Phe  
 245 250 255  
 Leu Leu Val Leu Leu Asp Tyr Gln Gly Met Leu Pro Val Cys Pro Leu  
 260 265 270  
 Leu Pro Gly Thr Ser Thr Thr Ser Thr Gly Pro Cys Lys Thr Cys Thr  
 275 280 285  
 Ile Pro Ala Arg Gly Thr Ser Met Phe Pro Ser Cys Cys Cys Thr Lys  
 290 295 300  
 Pro Ser Asp Gly Asn Cys Thr Cys Ile Pro Ile Pro Ser Ser Trp Ala  
 305 310 315 320  
 Phe Ala Arg Phe Leu Trp Glu Trp Ala Ser Val Arg Phe Ser Trp Leu  
 325 330 335  
 Ser Leu Leu Val Pro Phe Val Gln Trp Phe Val Gly Leu Ser Pro Thr  
 340 345 350  
 Val Trp Leu Ser Val Ile Trp Met Met Trp Tyr Trp Gly Pro Ser Leu  
 355 360 365  
 Tyr Asn Ile Leu Ser Pro Phe Leu Pro Leu Leu Pro Ile Phe Phe Cys  
 370 375 380  
 Leu Trp Val Tyr Ile  
 385

<210> 106

<211> 1167

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially

# Sequence Listing.txt

## synthesized sequence

```

<400> 106
atgggagggtt ggtcttccaa acctcggaaa ggcattgggga cgaatctttc tgttcccaat 60
cctctgggat tctttcccga tcaccagttg gacggcggcc gcgcgcaaca cgatgaagcc 120
gtagacaaca aattcaacaa agaacaacaa aacgcgttct atgagatctt acatttacct 180
aacttaaacg aagaacaacg aaacgccttc atccaaagtt taaaagatga cccaagccaa 240
agcgctaacc ttttagcaga agctaaaaag cttaatgatg ctcaggcgcc gaaagtagac 300
aacaattca acaaaagaaca acaaaacgcg ttctatgaga tcttacattt acctaactta 360
aacgaagaac aacgaaacgc cttcatccaa agtttaaaag atgacccaag ccaaagcgct 420
aaccttttag cagaagctaa aaagctaaat gatgctcagg cgccgaaagc ggccgcccct 480
gcaccgaaca tggagaacac aacatcagga ttcctaggac ccctgctcgt gttacaggcg 540
gggtttttct tgttgacaag aatcctcaca ataccacaga gtctagactc gtggtggact 600
tctctcaatt ttctaggggg agcaccacg tgtcctggcc aaaattcgca gtccccaacc 660
tccaatcact caccaacctc ttgtcctcca atttgtcctg gctatcgctg gatgtgtctg 720
cggcgtttta tcatattcct cttcatcctg ctgctatgcc tcatcttctt gttggttctt 780
ctggactacc aaggtatggt gcccgtttgt cctctacttc caggaacatc aaccaccagc 840
acggggccat gcaagacctg cacgattcct gctcaaggaa cctctatggt tccctcttgt 900
tgctgtacaa aaccttcgga cagaaactgc acttgatttc ccattccatc atcctgggct 960
ttcgcaagat tcctatggga gtgggcctca gtccgtttct cctggctcag tttactagt 1020
ccatttgttc agtggttcgt agggctttcc cccactgttt ggctttcagt tatatggatg 1080
atgtggtatt gggggccaag tctgtacaac atcttgagtc cttttttacc tctattacca 1140
attttctttt gtctttgggt atacatt 1167

```

<210> 107

<211> 389

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 107

```

Met Gly Gly Trp Ser Ser Lys Pro Arg Lys Gly Met Gly Thr Asn Leu
 1          5          10          15
Ser Val Pro Asn Pro Leu Gly Phe Phe Pro Asp His Gln Leu Asp Gly
          20          25          30
Gly Arg Ala Gln His Asp Glu Ala Val Asp Asn Lys Phe Asn Lys Glu
          35          40          45
Gln Gln Asn Ala Phe Tyr Glu Ile Leu His Leu Pro Asn Leu Asn Glu
          50          55          60
Glu Gln Arg Asn Ala Phe Ile Gln Ser Leu Lys Asp Asp Pro Ser Gln
          65          70          75          80
Ser Ala Asn Leu Leu Ala Glu Ala Lys Lys Leu Asn Asp Ala Gln Ala
          85          90          95
Pro Lys Val Asp Asn Lys Phe Asn Lys Glu Gln Gln Asn Ala Phe Tyr
          100          105          110
Glu Ile Leu His Leu Pro Asn Leu Asn Glu Glu Gln Arg Asn Ala Phe
          115          120          125
Ile Gln Ser Leu Lys Asp Asp Pro Ser Gln Ser Ala Asn Leu Leu Ala
          130          135          140
Glu Ala Lys Lys Leu Asn Asp Ala Gln Ala Pro Lys Ala Ala Ala Pro

```

Sequence Listing.txt

```

145             150             155             160
Ala Pro Asn Met Glu Asn Thr Thr Ser Gly Phe Leu Gly Pro Leu Leu
165             170             175
Val Leu Gln Ala Gly Phe Phe Leu Leu Thr Arg Ile Leu Thr Ile Pro
180             185             190
Gln Ser Leu Asp Ser Trp Trp Thr Ser Leu Asn Phe Leu Gly Gly Ala
195             200             205
Pro Thr Cys Pro Gly Gln Asn Ser Gln Ser Pro Thr Ser Asn His Ser
210             215             220
Pro Thr Ser Cys Pro Pro Ile Cys Pro Gly Tyr Arg Trp Met Cys Leu
225             230             235
Arg Arg Phe Ile Ile Phe Leu Phe Ile Leu Leu Leu Cys Leu Ile Phe
245             250             255
Leu Leu Val Leu Leu Asp Tyr Gln Gly Met Leu Pro Val Cys Pro Leu
260             265             270
Leu Pro Gly Thr Ser Thr Thr Ser Thr Gly Pro Cys Lys Thr Cys Thr
275             280             285
Ile Pro Ala Gln Gly Thr Ser Met Phe Pro Ser Cys Cys Cys Thr Lys
290             295             300
Pro Ser Asp Arg Asn Cys Thr Cys Ile Pro Ile Pro Ser Ser Trp Ala
305             310             315             320
Phe Ala Arg Phe Leu Trp Glu Trp Ala Ser Val Arg Phe Ser Trp Leu
325             330             335
Ser Leu Leu Val Pro Phe Val Gln Trp Phe Val Gly Leu Ser Pro Thr
340             345             350
Val Trp Leu Ser Val Ile Trp Met Met Trp Tyr Trp Gly Pro Ser Leu
355             360             365
Tyr Asn Ile Leu Ser Pro Phe Leu Pro Leu Leu Pro Ile Phe Phe Cys
370             375             380
Leu Trp Val Tyr Ile
385

```

<210> 108

<211> 1167

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially  
synthesized sequence

<400> 108

```

atgggaggtt ggtcttccaa acctcggaaa ggcattggga cgaatctttc tgttcccaat 60
cctctgggat tctttcccgga tcaccagttg gacggcggcc gcgcgcaaca cgatgaagcc 120
gtagacaaca aattcaacaa agaacaacaa aacgcgttct atgagatctt acatttacct 180
aacttaaacg aagaacaacg aaacgccttc atccaaagtt taaaagatga cccaagccaa 240
agcgctaacc ttttagcaga agctaaaaag ctaaattgatg ctcaggcgcc gaaagtagac 300

```



# Sequence Listing.txt

```

aacaattca acaagaaca acaaacgcg ttctatgaga tcttacattt acctaactta 360
aacgaagaac aacgaaacgc ctctatccaa agtttaaaag atgacccaag ccaaagcgct 420
aaccttttag cagaagctaa aaagctaaat gatgctcagg cgccgaaagc ggccgcccct 480
gcaccgaaca tggagaacac aacatcagga ttctaggac ccctgctcgt gttacaggcg 540
gggtttttct tgttgacaag aatcctcaca ataccacaga gtctagactc gtggtggact 600
tctctcaatt ttctaggggg agcaccacg tgcctggcc aaaattcgca gtccccaacc 660
tccaatcact caccaacctc ttgtcctcca attgtcctg gctatcgctg gatgtgtctg 720
cggcggtttta tcatattcct ctctatcctg ctgctatgcc tcatcttctt gttggttctt 780
ctggactacc aagggtatgtt gcccgtttgt cctctacttc caggaaacatc aaccaccagc 840
acggggccat gcaagacctg cacgattcct gctcgaggaa cctctatgtt tccctcttgt 900
tgctgtacaa aaccttcgga cagaaactgc acttgatttc ccatcccatc atcctgggct 960
ttcgcaagat tcctatggga gtgggcctca gtccgtttct cctggctcag ttactagtg 1020
ccatttggtc agtggttcgt agggctttcc cccactgttt ggctttcagt tatatggatg 1080
atgtggtatt gggggccaag tctgtacaac atcttgagtc ctttttacc tctattacca 1140
atctttcttt gtctttgggt atacatt 1167

```

<210> 109

<211> 389

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 109

```

Met Gly Gly Trp Ser Ser Lys Pro Arg Lys Gly Met Gly Thr Asn Leu
 1          5          10          15
Ser Val Pro Asn Pro Leu Gly Phe Phe Pro Asp His Gln Leu Asp Gly
          20          25          30
Gly Arg Ala Gln His Asp Glu Ala Val Asp Asn Lys Phe Asn Lys Glu
          35          40          45
Gln Gln Asn Ala Phe Tyr Glu Ile Leu His Leu Pro Asn Leu Asn Glu
          50          55          60
Glu Gln Arg Asn Ala Phe Ile Gln Ser Leu Lys Asp Asp Pro Ser Gln
          65          70          75          80
Ser Ala Asn Leu Leu Ala Glu Ala Lys Lys Leu Asn Asp Ala Gln Ala
          85          90          95
Pro Lys Val Asp Asn Lys Phe Asn Lys Glu Gln Gln Asn Ala Phe Tyr
          100          105          110
Glu Ile Leu His Leu Pro Asn Leu Asn Glu Glu Gln Arg Asn Ala Phe
          115          120          125
Ile Gln Ser Leu Lys Asp Asp Pro Ser Gln Ser Ala Asn Leu Leu Ala
          130          135          140
Glu Ala Lys Lys Leu Asn Asp Ala Gln Ala Pro Lys Ala Ala Ala Pro
          145          150          155          160
Ala Pro Asn Met Glu Asn Thr Thr Ser Gly Phe Leu Gly Pro Leu Leu
          165          170          175
Val Leu Gln Ala Gly Phe Phe Leu Leu Thr Arg Ile Leu Thr Ile Pro
          180          185          190

```

# Sequence Listing.txt

Gln Ser Leu Asp Ser Trp Trp Thr Ser Leu Asn Phe Leu Gly Gly Ala  
195 200 205  
Pro Thr Cys Pro Gly Gln Asn Ser Gln Ser Pro Thr Ser Asn His Ser  
210 215 220  
Pro Thr Ser Cys Pro Pro Ile Cys Pro Gly Tyr Arg Trp Met Cys Leu  
225 230 235 240  
Arg Arg Phe Ile Ile Phe Leu Phe Ile Leu Leu Leu Cys Leu Ile Phe  
245 250 255  
Leu Leu Val Leu Leu Asp Tyr Gln Gly Met Leu Pro Val Cys Pro Leu  
260 265 270  
Leu Pro Gly Thr Ser Thr Thr Ser Thr Gly Pro Cys Lys Thr Cys Thr  
275 280 285  
Ile Pro Ala Arg Gly Thr Ser Met Phe Pro Ser Cys Cys Cys Thr Lys  
290 295 300  
Pro Ser Asp Arg Asn Cys Thr Cys Ile Pro Ile Pro Ser Ser Trp Ala  
305 310 315 320  
Phe Ala Arg Phe Leu Trp Glu Trp Ala Ser Val Arg Phe Ser Trp Leu  
325 330 335  
Ser Leu Leu Val Pro Phe Val Gln Trp Phe Val Gly Leu Ser Pro Thr  
340 345 350  
Val Trp Leu Ser Val Ile Trp Met Met Trp Tyr Trp Gly Pro Ser Leu  
355 360 365  
Tyr Asn Ile Leu Ser Pro Phe Leu Pro Leu Leu Pro Ile Phe Phe Cys  
370 375 380  
Leu Trp Val Tyr Ile  
385

<210> 110

<211> 966

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 110

|            |             |            |            |             |            |     |
|------------|-------------|------------|------------|-------------|------------|-----|
| atgggaggtt | ggtcttccaa  | acctcggaaa | ggcatgggga | cgaatctttc  | tgttcccaat | 60  |
| cctctgggat | tccttcccga  | tcaccagttg | gacggcggcc | gcatgaactc  | tgattccgaa | 120 |
| tgcccgtgt  | ctcatgacgg  | ttactgcctg | catgatggcg | tatgcatgta  | catcgaagct | 180 |
| ctggacaaat | acgcatgcaa  | ctgtgttgta | ggttacatcg | gcgaacgttg  | ccagtatcgc | 240 |
| gacctgaaat | ggtgggaact  | gcgtaaggcg | gccgcccctg | caccgaacat  | ggagaacaca | 300 |
| acatcaggat | tcctaggacc  | cctgctcgtg | ttacaggcgg | ggtttttctt  | ggtgacaaga | 360 |
| atcctcacia | taccacagag  | tctagactcg | tggtggactt | ctctcaattt  | tctaggggga | 420 |
| gcacccacgt | gtcctggcca  | aaattcgcag | tccccaacct | ccaatcactc  | accaacctct | 480 |
| tgtcctccaa | tttgtcctgg  | ctatcgctgg | atgtgtctgc | ggcgttttat  | catattcctc | 540 |
| ttcatcctgc | tgctatgcct  | catcttcttg | ttggttcttc | tggaactacca | aggtatgttg | 600 |
| cccgtttgtc | ctctacttcc  | aggaacatca | accaccagca | cggggccatg  | caagacctgc | 660 |
| acgattcctg | ctcaagggaac | ctctatgttt | ccctcttggt | gctgtacaaa  | accttcggac | 720 |
| ggaaactgca | cttgatttcc  | catcccatca | tcctgggctt | tcgcaagatt  | cctatgggag | 780 |

# Sequence Listing.txt

```

tgggcctcag tccgtttctc ctggctcagt ttactagtgc catttggtca gtggttcgta 840
gggctttccc ccactgtttg gctttcagtt atatggatga tgtggtattg ggggccaagt 900
ctgtacaaca tcttgagtcc ctttttacct ctattaccaa ttttcttttg tctttgggta 960
tacatt 966

```

<210> 111

<211> 322

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 111

Met Gly Gly Trp Ser Ser Lys Pro Arg Lys Gly Met Gly Thr Asn Leu  
1 5 10 15

Ser Val Pro Asn Pro Leu Gly Phe Phe Pro Asp His Gln Leu Asp Gly  
20 25 30

Gly Arg Met Asn Ser Asp Ser Glu Cys Pro Leu Ser His Asp Gly Tyr  
35 40 45

Cys Leu His Asp Gly Val Cys Met Tyr Ile Glu Ala Leu Asp Lys Tyr  
50 55 60

Ala Cys Asn Cys Val Val Gly Tyr Ile Gly Glu Arg Cys Gln Tyr Arg  
65 70 75 80

Asp Leu Lys Trp Trp Glu Leu Arg Lys Ala Ala Ala Pro Ala Pro Asn  
85 90 95

Met Glu Asn Thr Thr Ser Gly Phe Leu Gly Pro Leu Leu Val Leu Gln  
100 105 110

Ala Gly Phe Phe Leu Leu Thr Arg Ile Leu Thr Ile Pro Gln Ser Leu  
115 120 125

Asp Ser Trp Trp Thr Ser Leu Asn Phe Leu Gly Gly Ala Pro Thr Cys  
130 135 140

Pro Gly Gln Asn Ser Gln Ser Pro Thr Ser Asn His Ser Pro Thr Ser  
145 150 155 160

Cys Pro Pro Ile Cys Pro Gly Tyr Arg Trp Met Cys Leu Arg Arg Phe  
165 170 175

Ile Ile Phe Leu Phe Ile Leu Leu Leu Cys Leu Ile Phe Leu Leu Val  
180 185 190

Leu Leu Asp Tyr Gln Gly Met Leu Pro Val Cys Pro Leu Leu Pro Gly  
195 200 205

Thr Ser Thr Thr Ser Thr Gly Pro Cys Lys Thr Cys Thr Ile Pro Ala  
210 215 220

Gln Gly Thr Ser Met Phe Pro Ser Cys Cys Cys Thr Lys Pro Ser Asp  
225 230 235 240

Gly Asn Cys Thr Cys Ile Pro Ile Pro Ser Ser Trp Ala Phe Ala Arg  
245 250 255

# Sequence Listing.txt

Phe Leu Trp Glu Trp Ala Ser Val Arg Phe Ser Trp Leu Ser Leu Leu  
260 265 270  
Val Pro Phe Val Gln Trp Phe Val Gly Leu Ser Pro Thr Val Trp Leu  
275 280 285  
Ser Val Ile Trp Met Met Trp Tyr Trp Gly Pro Ser Leu Tyr Asn Ile  
290 295 300  
Leu Ser Pro Phe Leu Pro Leu Leu Pro Ile Phe Phe Cys Leu Trp Val  
305 310 315 320  
Tyr Ile

<210> 112

<211> 966

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially  
synthesized sequence

<400> 112

```
atgggagggtt ggtcttccaa acctcggaaa ggcattgggga cgaatctttc tgttcccaat 60
cctctgggat tctttcccga tcaccagttg gacggcggcc gcatgaactc tgattccgaa 120
tgcccgtgt ctcatgacgg ttactgcctg catgatggcg tatgcatgta catcgaagct 180
ctggacaaat acgcatgcaa ctgtgttgta ggttacatcg gcgaacgttg ccagtatcgc 240
gacctgaaat ggtgggaact gcgtaaggcg gccgcccctg caccgaacat ggagaacaca 300
acatcaggat tcctaggacc cctgctcgtg ttacaggcgg ggtttttctt gttgacaaga 360
atcctcaciaa taccacagag tctagactcg tgggtggactt ctctcaattt tctaggggga 420
gcacccacgt gtcctggcca aaattcgag tccccaacct ccaatcactc accaacctct 480
tgtcctccaa tttgtcctgg ctatcgctgg atgtgtctgc ggcgttttat catattcctc 540
ttcatcctgc tgctatgcct catcttcttg ttggttcttc tggactacca aggtatgttg 600
ccggtttgtc ctctacttcc aggaacatca accaccagca cggggccatg caagacctgc 660
acgattcctg ctcgaggaac ctctatgttt ccctcttggt gctgtacaaa accttcggac 720
ggaaactgca cttgtattcc catcccatca tcctgggctt tcgcaagatt cctatgggag 780
tgggcctcag tccgtttctc ctggctcagt ttactagtgc catttgttca gtggttcgta 840
gggctttccc ccactgtttg gctttcagtt atatggatga tgtggtattg ggggcctaagt 900
ctgtacaaca tcttgagtc ctttttacct ctattaccaa ttttctttg tctttgggta 966
tacatt
```

<210> 113

<211> 322

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially  
synthesized sequence

<400> 113

Met Gly Gly Trp Ser Ser Lys Pro Arg Lys Gly Met Gly Thr Asn Leu  
1 5 10 15  
Ser Val Pro Asn Pro Leu Gly Phe Phe Pro Asp His Gln Leu Asp Gly  
20 25 30  
Gly Arg Met Asn Ser Asp Ser Glu Cys Pro Leu Ser His Asp Gly Tyr

## Sequence Listing.txt

35

40

45

Cys Leu His Asp Gly Val Cys Met Tyr Ile Glu Ala Leu Asp Lys Tyr  
 50 55 60  
 Ala Cys Asn Cys Val Val Gly Tyr Ile Gly Glu Arg Cys Gln Tyr Arg  
 65 70 75 80  
 Asp Leu Lys Trp Trp Glu Leu Arg Lys Ala Ala Ala Pro Ala Pro Asn  
 85 90 95  
 Met Glu Asn Thr Thr Ser Gly Phe Leu Gly Pro Leu Leu Val Leu Gln  
 100 105 110  
 Ala Gly Phe Phe Leu Leu Thr Arg Ile Leu Thr Ile Pro Gln Ser Leu  
 115 120 125  
 Asp Ser Trp Trp Thr Ser Leu Asn Phe Leu Gly Gly Ala Pro Thr Cys  
 130 135 140  
 Pro Gly Gln Asn Ser Gln Ser Pro Thr Ser Asn His Ser Pro Thr Ser  
 145 150 155 160  
 Cys Pro Pro Ile Cys Pro Gly Tyr Arg Trp Met Cys Leu Arg Arg Phe  
 165 170 175  
 Ile Ile Phe Leu Phe Ile Leu Leu Leu Cys Leu Ile Phe Leu Leu Val  
 180 185 190  
 Leu Leu Asp Tyr Gln Gly Met Leu Pro Val Cys Pro Leu Leu Pro Gly  
 195 200 205  
 Thr Ser Thr Thr Ser Thr Gly Pro Cys Lys Thr Cys Thr Ile Pro Ala  
 210 215 220  
 Arg Gly Thr Ser Met Phe Pro Ser Cys Cys Cys Thr Lys Pro Ser Asp  
 225 230 235 240  
 Gly Asn Cys Thr Cys Ile Pro Ile Pro Ser Ser Trp Ala Phe Ala Arg  
 245 250 255  
 Phe Leu Trp Glu Trp Ala Ser Val Arg Phe Ser Trp Leu Ser Leu Leu  
 260 265 270  
 Val Pro Phe Val Gln Trp Phe Val Gly Leu Ser Pro Thr Val Trp Leu  
 275 280 285  
 Ser Val Ile Trp Met Met Trp Tyr Trp Gly Pro Ser Leu Tyr Asn Ile  
 290 295 300  
 Leu Ser Pro Phe Leu Pro Leu Leu Pro Ile Phe Phe Cys Leu Trp Val  
 305 310 315 320  
 Tyr Ile

&lt;210&gt; 114

&lt;211&gt; 966

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificially synthesized sequence Sequence:Artificially synthesized sequence

<400> 114

```

atgggagggtt ggtcttccaa acctcggaaa ggcatgggga cgaatctttc tgttcccaat 60
cctctgggat tctttccga tcaccagttg gacggcggcc gcatgaactc tgattccgaa 120
tgcccgtgt ctcacgacgg ttactgcctg catgatggcg tatgcatgta catcgaagct 180
ctggacaaat acgcatgcaa ctgtgttgta gggtacatcg gcgaacgttg ccagtatcgc 240
gacctgaaat ggtgggaact gcgtaaggcg gccgcccctg caccgaacat ggagaacaca 300
acatcaggat tcctaggacc cctgctcgtg ttacaggcgg gggttttctt gttgacaaga 360
atcctcaca taccacagag tctagactcg tggtaggactt ctctcaattt tctaggggga 420
gcacccacgt gtcctggcca aaattcgcag tccccaacct ccaatcactc accaaccctc 480
tgtcctcaa tttgtcctgg ctatcgctgg atgtgtctgc ggcgttttat catattcctc 540
ttcatcctgc tgctatgcct catcttcttg ttggttcttc tggactacca aggtatgttg 600
cccgtttgtc ctctacttcc aggaacatca accaccagca cggggccatg caagacctgc 660
acgattcctg ctcaaggaaac ctctatgttt cctctgtgtt gctgtacaaa accttcggac 720
agaaactgca ctgtatttcc catcccatca tcctgggctt tgcgaagatt cctatgggag 780
tgggcctcag tccgtttctc ctggctcagt ttactagtgc catttgttca gtggttcgta 840
gggctttccc ccaactgttg gctttcagtt atatggatga tgtggtattg ggggccaaagt 900
ctgtacaaca tcttgagtc ctttttacct ctattaccaa ttttctttg tctttgggta 966
tacatt

```

<210> 115

<211> 322

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 115

```

Met Gly Gly Trp Ser Ser Lys Pro Arg Lys Gly Met Gly Thr Asn Leu
 1          5          10          15
Ser Val Pro Asn Pro Leu Gly Phe Phe Pro Asp His Gln Leu Asp Gly
          20          25          30
Gly Arg Met Asn Ser Asp Ser Glu Cys Pro Leu Ser His Asp Gly Tyr
          35          40          45
Cys Leu His Asp Gly Val Cys Met Tyr Ile Glu Ala Leu Asp Lys Tyr
          50          55          60
Ala Cys Asn Cys Val Val Gly Tyr Ile Gly Glu Arg Cys Gln Tyr Arg
          65          70          75          80
Asp Leu Lys Trp Trp Glu Leu Arg Lys Ala Ala Ala Pro Ala Pro Asn
          85          90          95
Met Glu Asn Thr Thr Ser Gly Phe Leu Gly Pro Leu Leu Val Leu Gln
          100          105          110
Ala Gly Phe Phe Leu Leu Thr Arg Ile Leu Thr Ile Pro Gln Ser Leu
          115          120          125
Asp Ser Trp Trp Thr Ser Leu Asn Phe Leu Gly Gly Ala Pro Thr Cys
          130          135          140
Pro Gly Gln Asn Ser Gln Ser Pro Thr Ser Asn His Ser Pro Thr Ser
          145          150          155          160

```

# Sequence Listing.txt

Cys Pro Pro Ile Cys Pro Gly Tyr Arg Trp Met Cys Leu Arg Arg Phe  
165 170 175  
Ile Ile Phe Leu Phe Ile Leu Leu Leu Cys Leu Ile Phe Leu Leu Val  
180 185 190  
Leu Leu Asp Tyr Gln Gly Met Leu Pro Val Cys Pro Leu Leu Pro Gly  
195 200 205  
Thr Ser Thr Thr Ser Thr Gly Pro Cys Lys Thr Cys Thr Ile Pro Ala  
210 215 220  
Gln Gly Thr Ser Met Phe Pro Ser Cys Cys Cys Thr Lys Pro Ser Asp  
225 230 235 240  
Arg Asn Cys Thr Cys Ile Pro Ile Pro Ser Ser Trp Ala Phe Ala Arg  
245 250 255  
Phe Leu Trp Glu Trp Ala Ser Val Arg Phe Ser Trp Leu Ser Leu Leu  
260 265 270  
Val Pro Phe Val Gln Trp Phe Val Gly Leu Ser Pro Thr Val Trp Leu  
275 280 285  
Ser Val Ile Trp Met Met Trp Tyr Trp Gly Pro Ser Leu Tyr Asn Ile  
290 295 300  
Leu Ser Pro Phe Leu Pro Leu Leu Pro Ile Phe Phe Cys Leu Trp Val  
305 310 315 320  
Tyr Ile

<210> 116

<211> 966

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 116

|             |            |            |            |             |             |     |
|-------------|------------|------------|------------|-------------|-------------|-----|
| atgggagggt  | ggtcttccaa | acctcggaaa | ggcatgggga | cgaatctttc  | tgttcccaat  | 60  |
| cctctgggat  | tctttcccga | tcaccagtgt | gacggcggcc | gcatgaactc  | tgattccgaa  | 120 |
| tgcccgtgt   | ctcatgacgg | ttactgcctg | catgatggcg | tatgcatgta  | catcgaagct  | 180 |
| ctggacaaat  | acgcatgcaa | ctgtgttgta | ggttacatcg | gcgaacgttg  | ccagtatcgc  | 240 |
| gacctgaaat  | ggtgggaact | gcgtaaggcg | gccgcccctg | caccgaacat  | ggagaacaca  | 300 |
| acatcaggat  | tcctaggacc | cctgctcgtg | ttacaggcgg | ggtttttctt  | gttgacaaga  | 360 |
| atcctcacia  | taccacagag | tctagactcg | tggtggactt | ctctcaattt  | tctaggggga  | 420 |
| gcacccacgt  | gtcctggcca | aaattcgcag | tccccaacct | ccaatcactc  | accaacctct  | 480 |
| tgtcctccaa  | tttgtcctgg | ctatcgctgg | atgtgtctgc | ggcgttttat  | catattcctc  | 540 |
| ttcatcctgc  | tgctatgcct | catcttcttg | ttggttcttc | tggaactacca | aggtatgttg  | 600 |
| cccgtttgtc  | ctctacttcc | aggaacatca | accaccagca | cggggccatg  | caagacctgc  | 660 |
| acgatttcctg | ctcgaggaac | ctctatgttt | ccctcttggt | gctgtacaaa  | accttcggac  | 720 |
| agaaactgca  | cttgatttcc | catcccatca | tcctgggctt | tcgcaagatt  | cctatgggag  | 780 |
| tgggcctcag  | tccgtttctc | ctggctcagt | ttactagtgc | catttgttca  | gtgggttcgta | 840 |
| gggctttccc  | ccactgtttg | gctttcagtt | atatggatga | tgtggtattg  | ggggccaagt  | 900 |
| ctgtacaaca  | tcttgagtcc | ctttttacct | ctattaccaa | ttttcttttg  | tctttgggta  | 960 |
| tacatt      |            |            |            |             |             | 966 |

Sequence Listing.txt

<210> 117  
 <211> 322  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence:Artificially  
 synthesized sequence

<400> 117  
 Met Gly Gly Trp Ser Ser Lys Pro Arg Lys Gly Met Gly Thr Asn Leu  
 1 5 10 15  
 Ser Val Pro Asn Pro Leu Gly Phe Phe Pro Asp His Gln Leu Asp Gly  
 20 25 30  
 Gly Arg Met Asn Ser Asp Ser Glu Cys Pro Leu Ser His Asp Gly Tyr  
 35 40 45  
 Cys Leu His Asp Gly Val Cys Met Tyr Ile Glu Ala Leu Asp Lys Tyr  
 50 55 60  
 Ala Cys Asn Cys Val Val Gly Tyr Ile Gly Glu Arg Cys Gln Tyr Arg  
 65 70 75 80  
 Asp Leu Lys Trp Trp Glu Leu Arg Lys Ala Ala Ala Pro Ala Pro Asn  
 85 90 95  
 Met Glu Asn Thr Thr Ser Gly Phe Leu Gly Pro Leu Leu Val Leu Gln  
 100 105 110  
 Ala Gly Phe Phe Leu Leu Thr Arg Ile Leu Thr Ile Pro Gln Ser Leu  
 115 120 125  
 Asp Ser Trp Trp Thr Ser Leu Asn Phe Leu Gly Gly Ala Pro Thr Cys  
 130 135 140  
 Pro Gly Gln Asn Ser Gln Ser Pro Thr Ser Asn His Ser Pro Thr Ser  
 145 150 155 160  
 Cys Pro Pro Ile Cys Pro Gly Tyr Arg Trp Met Cys Leu Arg Arg Phe  
 165 170 175  
 Ile Ile Phe Leu Phe Ile Leu Leu Leu Cys Leu Ile Phe Leu Leu Val  
 180 185 190  
 Leu Leu Asp Tyr Gln Gly Met Leu Pro Val Cys Pro Leu Leu Pro Gly  
 195 200 205  
 Thr Ser Thr Thr Ser Thr Gly Pro Cys Lys Thr Cys Thr Ile Pro Ala  
 210 215 220  
 Arg Gly Thr Ser Met Phe Pro Ser Cys Cys Cys Thr Lys Pro Ser Asp  
 225 230 235 240  
 Arg Asn Cys Thr Cys Ile Pro Ile Pro Ser Ser Trp Ala Phe Ala Arg  
 245 250 255  
 Phe Leu Trp Glu Trp Ala Ser Val Arg Phe Ser Trp Leu Ser Leu Leu  
 260 265 270  
 Val Pro Phe Val Gln Trp Phe Val Gly Leu Ser Pro Thr Val Trp Leu  
 275 280 285



# Sequence Listing.txt

Ser Val Ile Trp Met Met Trp Tyr Trp Gly Pro Ser Leu Tyr Asn Ile  
290 295 300

Leu Ser Pro Phe Leu Pro Leu Leu Pro Ile Phe Phe Cys Leu Trp Val  
305 310 315 320

Tyr Ile

<210> 118

<211> 825

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 118

```
atgggagggtt ggtcttccaa acctcggaaa ggcattgggga cgaatctttc tgttcccaat 60
cctctgggat tctttcccga tcaccagttg gacggcggcc gctggagcca cccgcagttc 120
gaaaaagcgg ccgcccctgc accgaacatg gagaacacaa catcaggatt cctaggacct 180
ctgctcgtgt tacaggcggg gtttttcttg ttgacaagaa tcctcacaat accacagagt 240
ctagactcgt ggtggacttc tctcaatttt ctagggggag caccacagtg tcctggccaa 300
aatcgcagtt ccccaacctc caatcactca ccaacctctt gtcttccaat ttgtcctggc 360
tatcgctgga tgtgtctgct gcgttttatc atattcctct tcattcctgt gctatgcctc 420
atcttcttgt tggttcttct ggactaccaa ggtatgttgc ccgtttgtcc tctacttcca 480
ggaacatcaa ccaccagcac ggggccatgc aagacctgca cgattcctgc tcaaggaacc 540
tctatgtttc cctcttggtg ctgtacaaaa cttcggacg gaaactgcac ttgtattccc 600
atcccatcat cctgggcttt cgcaagattc ctatgggagt gggcctcagt ccgtttctcc 660
tggctcagtt tactagtgcc atttgttcag tggttcgtag ggctttcccc cactgtttgg 720
ctttcagtta tatggatgat gtggtattgg gggccaagtc tgtacaacat cttgagtccc 780
tttttacctc tattaccaat tttcttttgt ctttgggtat acatt 825
```

<210> 119

<211> 275

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 119

Met Gly Gly Trp Ser Ser Lys Pro Arg Lys Gly Met Gly Thr Asn Leu  
1 5 10 15

Ser Val Pro Asn Pro Leu Gly Phe Phe Pro Asp His Gln Leu Asp Gly  
20 25 30

Gly Arg Trp Ser His Pro Gln Phe Glu Lys Ala Ala Ala Pro Ala Pro  
35 40 45

Asn Met Glu Asn Thr Thr Ser Gly Phe Leu Gly Pro Leu Leu Val Leu  
50 55 60

Gln Ala Gly Phe Phe Leu Leu Thr Arg Ile Leu Thr Ile Pro Gln Ser  
65 70 75 80

Leu Asp Ser Trp Trp Thr Ser Leu Asn Phe Leu Gly Gly Ala Pro Thr  
Page 81

## Sequence Listing.txt

85

90

95

Cys Pro Gly Gln Asn Ser Gln Ser Pro Thr Ser Asn His Ser Pro Thr  
 100 105 110  
 Ser Cys Pro Pro Ile Cys Pro Gly Tyr Arg Trp Met Cys Leu Arg Arg  
 115 120 125  
 Phe Ile Ile Phe Leu Phe Ile Leu Leu Leu Cys Leu Ile Phe Leu Leu  
 130 135 140  
 Val Leu Leu Asp Tyr Gln Gly Met Leu Pro Val Cys Pro Leu Leu Pro  
 145 150 155 160  
 Gly Thr Ser Thr Thr Ser Thr Gly Pro Cys Lys Thr Cys Thr Ile Pro  
 165 170 175  
 Ala Gln Gly Thr Ser Met Phe Pro Ser Cys Cys Cys Thr Lys Pro Ser  
 180 185 190  
 Asp Gly Asn Cys Thr Cys Ile Pro Ile Pro Ser Ser Trp Ala Phe Ala  
 195 200 205  
 Arg Phe Leu Trp Glu Trp Ala Ser Val Arg Phe Ser Trp Leu Ser Leu  
 210 215 220  
 Leu Val Pro Phe Val Gln Trp Phe Val Gly Leu Ser Pro Thr Val Trp  
 225 230 235 240  
 Leu Ser Val Ile Trp Met Met Trp Tyr Trp Gly Pro Ser Leu Tyr Asn  
 245 250 255  
 Ile Leu Ser Pro Phe Leu Pro Leu Leu Pro Ile Phe Phe Cys Leu Trp  
 260 265 270  
 Val Tyr Ile  
 275

&lt;210&gt; 120

&lt;211&gt; 825

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence:Artificially synthesized sequence

&lt;400&gt; 120

```

atgggagggt ggtcttccaa acctcggaaa ggcattggga cgaatctttc tgttcccaat 60
cctctgggat tctttcccga tcaccagttg gacggcggcc gctggagcca cccgcagttc 120
gaaaaagcgg ccgcccctgc accgaacatg gagaacacaa catcaggatt cctaggaccc 180
ctgctcgtgt tacaggcggg gtttttcttg ttgacaagaa tcctcacaat accacagagt 240
ctagactcgt ggtggacttc tctcaatttt ctagggggag caccacagtg tcctggccaa 300
aatcgcagt ccccaacctc caatcactca ccaacctctt gtcctccaat ttgtcctggc 360
tatcgctgga tgtgtctgcg gcgttttatc atattcctct tcatactgct gctatgcctc 420
atcttcttgt tggttcttct ggactaccaa ggtatgttgc ccgtttgtcc tctacttcca 480
ggaacatcaa ccaccagcac ggggccatgc aagacctgca cgattcctgc tcgaggaacc 540
tctatgtttc cctcttggtg ctgtacaaaa ccttcggacg gaaactgcac ttgtattccc 600
atcccatcat cctgggcttt cgcaagattc ctatgggagt gggcctcagt ccgtttctct 660
tggctcagtt tactagtgcc atttgttcag tggttcgtag ggctttcccc cactgtttgg 720
ctttcagtta tatggatgat gtgggtattg gggccaagtc tgtacaacat cttgagtccc 780
tttttacctc tattaccaat tttcttttgt ctttgggtat acatt 825

```

# Sequence Listing.txt

<210> 121

<211> 275

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 121

```
Met Gly Gly Trp Ser Ser Lys Pro Arg Lys Gly Met Gly Thr Asn Leu
 1          5          10          15
Ser Val Pro Asn Pro Leu Gly Phe Phe Pro Asp His Gln Leu Asp Gly
          20          25          30
Gly Arg Trp Ser His Pro Gln Phe Glu Lys Ala Ala Ala Pro Ala Pro
          35          40          45
Asn Met Glu Asn Thr Thr Ser Gly Phe Leu Gly Pro Leu Leu Val Leu
          50          55          60
Gln Ala Gly Phe Phe Leu Leu Thr Arg Ile Leu Thr Ile Pro Gln Ser
          65          70          75          80
Leu Asp Ser Trp Trp Thr Ser Leu Asn Phe Leu Gly Gly Ala Pro Thr
          85          90          95
Cys Pro Gly Gln Asn Ser Gln Ser Pro Thr Ser Asn His Ser Pro Thr
          100          105          110
Ser Cys Pro Pro Ile Cys Pro Gly Tyr Arg Trp Met Cys Leu Arg Arg
          115          120          125
Phe Ile Ile Phe Leu Phe Ile Leu Leu Leu Cys Leu Ile Phe Leu Leu
          130          135          140
Val Leu Leu Asp Tyr Gln Gly Met Leu Pro Val Cys Pro Leu Leu Pro
          145          150          155          160
Gly Thr Ser Thr Thr Ser Thr Gly Pro Cys Lys Thr Cys Thr Ile Pro
          165          170          175
Ala Arg Gly Thr Ser Met Phe Pro Ser Cys Cys Cys Thr Lys Pro Ser
          180          185          190
Asp Gly Asn Cys Thr Cys Ile Pro Ile Pro Ser Ser Trp Ala Phe Ala
          195          200          205
Arg Phe Leu Trp Glu Trp Ala Ser Val Arg Phe Ser Trp Leu Ser Leu
          210          215          220
Leu Val Pro Phe Val Gln Trp Phe Val Gly Leu Ser Pro Thr Val Trp
          225          230          235          240
Leu Ser Val Ile Trp Met Met Trp Tyr Trp Gly Pro Ser Leu Tyr Asn
          245          250          255
Ile Leu Ser Pro Phe Leu Pro Leu Leu Pro Ile Phe Phe Cys Leu Trp
          260          265          270
```

# Sequence Listing.txt

Val Tyr Ile  
275

<210> 122  
<211> 825  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Artificially  
synthesized sequence

```
<400> 122
atgggagggtt ggtcttccaa acctcggaaa ggcattgggga cgaatctttc tgttcccaat 60
cctctgggat tctttcccga tcaccagttg gacggcggcc gctggagcca cccgcagttc 120
gaaaaagcgg ccgcccctgc accgaacatg gagaacacaa catcaggatt cctaggacct 180
ctgctcgtgt tacaggcggg gtttttcttg ttgacaagaa tcctcacaat accacagagt 240
ctagactcgt ggtggacttc tctcaatttt ctagggggag caccacagtg tcctggccaa 300
aattcgcagt ccccaacctc caatcactca ccaacctctt gtcttccaat ttgtcctggc 360
tatcgctgga tgtgtctgcg gcgttttatc atattcctct tcattcctgt gctatgcctc 420
atcttcttgt tggttcttct ggactaccaa ggtatgttgc ccgtttgtcc tctacttcca 480
ggaacatcaa ccaccagcac ggggccatgc aagacctgca cgattcctgc tcaaggaacc 540
tctatgtttc cctcttgttg ctgtacaaaa ccttcggaca gaaactgcac ttgtattccc 600
atcccatcat cctgggcttt cgcaagattc ctatgggagt gggcctcagt ccgtttctcc 660
tggctcagtt tactagtgcc atttgttcag tggttcgtag ggctttcccc cactgttttg 720
ctttcagtta tatggatgat gtggtattgg gggccaagtc tgtacaacat cttgagtccc 780
tttttacctc tattaccaat tttcttttgt ctttgggtat acatt 825
```

<210> 123  
<211> 275  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Artificially  
synthesized sequence

```
<400> 123
Met Gly Gly Trp Ser Ser Lys Pro Arg Lys Gly Met Gly Thr Asn Leu
 1          5          10          15
Ser Val Pro Asn Pro Leu Gly Phe Phe Pro Asp His Gln Leu Asp Gly
          20          25          30
Gly Arg Trp Ser His Pro Gln Phe Glu Lys Ala Ala Ala Pro Ala Pro
          35          40          45
Asn Met Glu Asn Thr Thr Ser Gly Phe Leu Gly Pro Leu Leu Val Leu
          50          55          60
Gln Ala Gly Phe Phe Leu Leu Thr Arg Ile Leu Thr Ile Pro Gln Ser
          65          70          75          80
Leu Asp Ser Trp Trp Thr Ser Leu Asn Phe Leu Gly Gly Ala Pro Thr
          85          90          95
Cys Pro Gly Gln Asn Ser Gln Ser Pro Thr Ser Asn His Ser Pro Thr
          100          105          110
Ser Cys Pro Pro Ile Cys Pro Gly Tyr Arg Trp Met Cys Leu Arg Arg
          115          120          125
```

# Sequence Listing.txt

Phe Ile Ile Phe Leu Phe Ile Leu Leu Leu Cys Leu Ile Phe Leu Leu  
130 135 140  
Val Leu Leu Asp Tyr Gln Gly Met Leu Pro Val Cys Pro Leu Leu Pro  
145 150 155 160  
Gly Thr Ser Thr Thr Ser Thr Gly Pro Cys Lys Thr Cys Thr Ile Pro  
165 170 175  
Ala Gln Gly Thr Ser Met Phe Pro Ser Cys Cys Cys Thr Lys Pro Ser  
180 185 190  
Asp Arg Asn Cys Thr Cys Ile Pro Ile Pro Ser Ser Trp Ala Phe Ala  
195 200 205  
Arg Phe Leu Trp Glu Trp Ala Ser Val Arg Phe Ser Trp Leu Ser Leu  
210 215 220  
Leu Val Pro Phe Val Gln Trp Phe Val Gly Leu Ser Pro Thr Val Trp  
225 230 235 240  
Leu Ser Val Ile Trp Met Met Trp Tyr Trp Gly Pro Ser Leu Tyr Asn  
245 250 255  
Ile Leu Ser Pro Phe Leu Pro Leu Leu Pro Ile Phe Phe Cys Leu Trp  
260 265 270  
Val Tyr Ile  
275

<210> 124  
<211> 825  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Artificially  
synthesized sequence

<400> 124  
atgggagggt ggtcttccaa acctcggaaa ggcattggga cgaatctttc tgttcccaat 60  
cctctgggat tctttcccga tcaccagttg gacggcggcc gctggagcca cccgcagttc 120  
gaaaaagcgg ccgcccctgc accgaacatg gagaacacaa catcaggatt cctaggacct 180  
ctgctcgtgt tacaggcggg gtttttcttg ttgacaagaa tcctcacaat accacagagt 240  
ctagactcgt ggtggacttc tctcaatttt ctagggggag caccacagtg tcctggccaa 300  
aattcgcagt ccccaacctc caatcactca ccaacctctt gtcctccaat ttgtcctggc 360  
tatcgtctga tgtgtctgcg gcgttttatc atattcctct tcatcctgct gctatgcctc 420  
atcttcttgt tggttcttct ggactaccaa ggtatgttgc ccgtttgtcc tctacttcca 480  
ggaacatcaa ccaccagcac ggggccatgc aagacctgca cgattcctgc tcgaggaacc 540  
tctatgtttc cctcttggtg ctgtacaaaa ccttcggaca gaaactgcac ttgtattccc 600  
atcccatcat cctgggcttt cgcaagattc ctatgggagt gggcctcagt ccgtttctcc 660  
tggtcagtt tactagtgcc atttgttcag tggttcgtag ggctttcccc cactgtttgg 720  
ctttcagtta tatggatgat gtggtattgg gggccaagtc gtacaacat cttgagtccc 780  
tttttacctc tattaccaat tttcttttgt ctttgggtat acatt 825

<210> 125  
<211> 275  
<212> PRT  
<213> Artificial Sequence

Sequence Listing.txt

<220>

<223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 125

```

Met Gly Gly Trp Ser Ser Lys Pro Arg Lys Gly Met Gly Thr Asn Leu
 1          5          10          15
Ser Val Pro Asn Pro Leu Gly Phe Phe Pro Asp His Gln Leu Asp Gly
          20          25          30
Gly Arg Trp Ser His Pro Gln Phe Glu Lys Ala Ala Ala Pro Ala Pro
          35          40          45
Asn Met Glu Asn Thr Thr Ser Gly Phe Leu Gly Pro Leu Leu Val Leu
 50          55          60
Gln Ala Gly Phe Phe Leu Leu Thr Arg Ile Leu Thr Ile Pro Gln Ser
 65          70          75          80
Leu Asp Ser Trp Trp Thr Ser Leu Asn Phe Leu Gly Gly Ala Pro Thr
          85          90          95
Cys Pro Gly Gln Asn Ser Gln Ser Pro Thr Ser Asn His Ser Pro Thr
          100          105          110
Ser Cys Pro Pro Ile Cys Pro Gly Tyr Arg Trp Met Cys Leu Arg Arg
          115          120          125
Phe Ile Ile Phe Leu Phe Ile Leu Leu Leu Cys Leu Ile Phe Leu Leu
          130          135          140
Val Leu Leu Asp Tyr Gln Gly Met Leu Pro Val Cys Pro Leu Leu Pro
          145          150          155          160
Gly Thr Ser Thr Thr Ser Thr Gly Pro Cys Lys Thr Cys Thr Ile Pro
          165          170          175
Ala Arg Gly Thr Ser Met Phe Pro Ser Cys Cys Cys Thr Lys Pro Ser
          180          185          190
Asp Arg Asn Cys Thr Cys Ile Pro Ile Pro Ser Ser Trp Ala Phe Ala
          195          200          205
Arg Phe Leu Trp Glu Trp Ala Ser Val Arg Phe Ser Trp Leu Ser Leu
          210          215          220
Leu Val Pro Phe Val Gln Trp Phe Val Gly Leu Ser Pro Thr Val Trp
          225          230          235          240
Leu Ser Val Ile Trp Met Met Trp Tyr Trp Gly Pro Ser Leu Tyr Asn
          245          250          255
Ile Leu Ser Pro Phe Leu Pro Leu Leu Pro Ile Phe Phe Cys Leu Trp
          260          265          270
Val Tyr Ile
          275

```

<210> 126

<211> 1203

<212> DNA

Sequence Listing.txt

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 126

```

atgggaggtt ggtcttccaa acctcggaaa ggcattggga cgaatctttc tgttcccaat 60
cctctgggat tctttcccga tcaccagttg gaccctgcgt tcggagccaa ctcaaacaat 120
ccagattggg gcggccgcgc gcaacacgat gaagccgtag acaacaaatt caacaaagaa 180
caacaaaacg cgttctatga gatcttacat ttacctaact taaacgaaga acaacgaaac 240
gccttcatcc aaagttaaaa agatgaccca agccaaagcg ctaacctttt agcagaagct 300
aaaaagctaa atgatgctca ggcgccgaaa gtagacaaca aattcaacaa agaacaacaa 360
aacgcgttct atgagatctt acatttacct aacttaaacg aagaacaacg aaacgccttc 420
atccaaagtt taaaagatga cccaagccaa agcgctaacc ttttagcaga agctaaaaag 480
ctaaatgatg ctccaggcgc gaaagcggcc gcccctgcac cgaacatgga gaacacaaca 540
tcaggattcc taggaccctt gctcgtgtta caggcggggt ttttcttggt gacaagaatc 600
ctcacataac cacagagtct agactcgtgg tggacttctc tcaattttct agggggagca 660
cccacgtgtc ctggccaaaa ttgcgagtc ccaacctcca atcactcacc aacctcttgt 720
cttccaaatt gtcctggcta tcgctggatg tgtctgcggc gttttatcat attcctcttc 780
atcctgctgc tatgcctcat ctctctgttg gttcttcttg actaccaagg tatgttgccc 840
gtttgtcttc tacttccagg aacatcaacc accagcacgg ggccatgcaa gacctgcacg 900
attcctgctc aaggaacctc tatgtttccc tcttgttgct gtacaaaacc ttcggacgga 960
aactgcactt gtattcccat cccatcatcc tgggctttcg caagattcct atgggagtg 1020
gcctcagtcg gtttctctg gctcagttta ctagtgccat ttgttcagtg gttcgtagg 1080
ctttcccca ctggttggtt ttcagttata ttgatgatgt ggtattgggg gccaaagtct 1140
tacaacatct tgagtccctt tttacctcta ttaccaattt tcttttgtct ttgggtatac 1200
att 1203

```

<210> 127

<211> 401

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 127

```

Met Gly Gly Trp Ser Ser Lys Pro Arg Lys Gly Met Gly Thr Asn Leu
 1          5          10          15
Ser Val Pro Asn Pro Leu Gly Phe Phe Pro Asp His Gln Leu Asp Pro
          20          25          30
Ala Phe Gly Ala Asn Ser Asn Asn Pro Asp Trp Gly Gly Arg Ala Gln
          35          40          45
His Asp Glu Ala Val Asp Asn Lys Phe Asn Lys Glu Gln Gln Asn Ala
          50          55          60
Phe Tyr Glu Ile Leu His Leu Pro Asn Leu Asn Glu Glu Gln Arg Asn
          65          70          75          80
Ala Phe Ile Gln Ser Leu Lys Asp Asp Pro Ser Gln Ser Ala Asn Leu
          85          90          95
Leu Ala Glu Ala Lys Lys Leu Asn Asp Ala Gln Ala Pro Lys Val Asp
          100          105          110
Asn Lys Phe Asn Lys Glu Gln Gln Asn Ala Phe Tyr Glu Ile Leu His
          115          120          125

```

# Sequence Listing.txt

```

Leu Pro Asn Leu Asn Glu Glu Gln Arg Asn Ala Phe Ile Gln Ser Leu
130      135      140
Lys Asp Asp Pro Ser Gln Ser Ala Asn Leu Leu Ala Glu Ala Lys Lys
145      150      155      160
Leu Asn Asp Ala Gln Ala Pro Lys Ala Ala Ala Pro Ala Pro Asn Met
165      170      175
Glu Asn Thr Thr Ser Gly Phe Leu Gly Pro Leu Leu Val Leu Gln Ala
180      185      190
Gly Phe Phe Leu Leu Thr Arg Ile Leu Thr Ile Pro Gln Ser Leu Asp
195      200      205
Ser Trp Trp Thr Ser Leu Asn Phe Leu Gly Gly Ala Pro Thr Cys Pro
210      215      220
Gly Gln Asn Ser Gln Ser Pro Thr Ser Asn His Ser Pro Thr Ser Cys
225      230      235      240
Pro Pro Ile Cys Pro Gly Tyr Arg Trp Met Cys Leu Arg Arg Phe Ile
245      250      255
Ile Phe Leu Phe Ile Leu Leu Leu Cys Leu Ile Phe Leu Leu Val Leu
260      265      270
Leu Asp Tyr Gln Gly Met Leu Pro Val Cys Pro Leu Leu Pro Gly Thr
275      280      285
Ser Thr Thr Ser Thr Gly Pro Cys Lys Thr Cys Thr Ile Pro Ala Gln
290      295      300
Gly Thr Ser Met Phe Pro Ser Cys Cys Cys Thr Lys Pro Ser Asp Gly
305      310      315      320
Asn Cys Thr Cys Ile Pro Ile Pro Ser Ser Trp Ala Phe Ala Arg Phe
325      330      335
Leu Trp Glu Trp Ala Ser Val Arg Phe Ser Trp Leu Ser Leu Leu Val
340      345      350
Pro Phe Val Gln Trp Phe Val Gly Leu Ser Pro Thr Val Trp Leu Ser
355      360      365
Val Ile Trp Met Met Trp Tyr Trp Gly Pro Ser Leu Tyr Asn Ile Leu
370      375      380
Ser Pro Phe Leu Pro Leu Leu Pro Ile Phe Phe Cys Leu Trp Val Tyr
385      390      395      400
Ile

```

<210> 128

<211> 1203

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially



# Sequence Listing.txt

## synthesized sequence

```
<400> 128
atgggagggtt ggtcttccaa acctcggaaa ggcattgggga cgaatctttc tgttcccaat 60
cctctgggat tctttcccga tcaccagttg gaccctgcgt tcggagccaa ctcaaacaat 120
ccagattggg gcggccgcgc gcaacacgat gaagccgtag acaacaaatt caacaaagaa 180
caacaaaacg cgttctatga gatcttacat ttacctaaact taaacgaaga acaacgaaac 240
gccttcatcc aaagttaaag agatgaccca agccaaagcg ctaacctttt agcagaagct 300
aaaaagctaa atgatgctca ggcgcgaaa gtagacaaca aattcaacaa agaacaacaa 360
aacgcgttct atgagatctt acatttacct aacttaaacg aagaacaacg aaacgccttc 420
atccaaagtt taaaagatga cccaagccaa agcgctaacc ttttagcaga agctaaaaag 480
ctaaatgatg ctcaggcgcc gaaagcggcc gccctgcac cgaacatgga gaacacaaca 540
tcaggattcc taggaccctt gctcgtgta caggcgggtt tttcttggt gacaagaatc 600
ctcacaatac cacagagtct agactcgtgg tggacttctc tcaattttct agggggagca 660
cccacgtgtc ctggccaaaa ttcgcagtcc ccaacctcca atcactcacc aacctcttgt 720
cctccaattt gtcctggcta tcgctggatg tgtctgcggc gttttatcat attcctcttc 780
atcctgctgc tatgcctcat ctcttggtg gttcttctgg actaccaagg tatgttgccc 840
gtttgtcctc tacttccagg aacatcaacc accagcacgg ggccatgcaa gacctgcacg 900
attcctgctc gaggaacctc tatgtttccc tcttggtgct gtacaaaacc ttcggacgga 960
aactgcattt gtattcccat cccatcatcc tgggctttcg caagattcct atgggagtg 1020
gcctcagtcg gtttctcctg gctcagttta ctagtgccat ttgttcagtg gttcgtaggg 1080
ctttcccca ctgtttggct ttcagttata tggatgatgt ggtattgggg gccaaagtctg 1140
tacaacatct tgagtccctt tttacctcta ttaccaattt tcttttgtct ttgggtatac 1200
att 1203
```

<210> 129

<211> 401

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 129

```
Met Gly Gly Trp Ser Ser Lys Pro Arg Lys Gly Met Gly Thr Asn Leu
 1          5          10          15
Ser Val Pro Asn Pro Leu Gly Phe Phe Pro Asp His Gln Leu Asp Pro
          20          25          30
Ala Phe Gly Ala Asn Ser Asn Asn Pro Asp Trp Gly Gly Arg Ala Gln
          35          40          45
His Asp Glu Ala Val Asp Asn Lys Phe Asn Lys Glu Gln Gln Asn Ala
          50          55          60
Phe Tyr Glu Ile Leu His Leu Pro Asn Leu Asn Glu Glu Gln Arg Asn
          65          70          75          80
Ala Phe Ile Gln Ser Leu Lys Asp Asp Pro Ser Gln Ser Ala Asn Leu
          85          90          95
Leu Ala Glu Ala Lys Lys Leu Asn Asp Ala Gln Ala Pro Lys Val Asp
          100          105          110
Asn Lys Phe Asn Lys Glu Gln Gln Asn Ala Phe Tyr Glu Ile Leu His
          115          120          125
Leu Pro Asn Leu Asn Glu Glu Gln Arg Asn Ala Phe Ile Gln Ser Leu
          130          135          140
```

Sequence Listing.txt

Lys Asp Asp Pro Ser Gln Ser Ala Asn Leu Leu Ala Glu Ala Lys Lys  
 145 150 155 160

Leu Asn Asp Ala Gln Ala Pro Lys Ala Ala Ala Pro Ala Pro Asn Met  
 165 170 175

Glu Asn Thr Thr Ser Gly Phe Leu Gly Pro Leu Leu Val Leu Gln Ala  
 180 185 190

Gly Phe Phe Leu Leu Thr Arg Ile Leu Thr Ile Pro Gln Ser Leu Asp  
 195 200 205

Ser Trp Trp Thr Ser Leu Asn Phe Leu Gly Gly Ala Pro Thr Cys Pro  
 210 215 220

Gly Gln Asn Ser Gln Ser Pro Thr Ser Asn His Ser Pro Thr Ser Cys  
 225 230 235 240

Pro Pro Ile Cys Pro Gly Tyr Arg Trp Met Cys Leu Arg Arg Phe Ile  
 245 250 255

Ile Phe Leu Phe Ile Leu Leu Leu Cys Leu Ile Phe Leu Leu Val Leu  
 260 265 270

Leu Asp Tyr Gln Gly Met Leu Pro Val Cys Pro Leu Leu Pro Gly Thr  
 275 280 285

Ser Thr Thr Ser Thr Gly Pro Cys Lys Thr Cys Thr Ile Pro Ala Arg  
 290 295 300

Gly Thr Ser Met Phe Pro Ser Cys Cys Cys Thr Lys Pro Ser Asp Gly  
 305 310 315 320

Asn Cys Thr Cys Ile Pro Ile Pro Ser Ser Trp Ala Phe Ala Arg Phe  
 325 330 335

Leu Trp Glu Trp Ala Ser Val Arg Phe Ser Trp Leu Ser Leu Leu Val  
 340 345 350

Pro Phe Val Gln Trp Phe Val Gly Leu Ser Pro Thr Val Trp Leu Ser  
 355 360 365

Val Ile Trp Met Met Trp Tyr Trp Gly Pro Ser Leu Tyr Asn Ile Leu  
 370 375 380

Ser Pro Phe Leu Pro Leu Leu Pro Ile Phe Phe Cys Leu Trp Val Tyr  
 385 390 395 400

Ile

<210> 130

<211> 1203

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially  
 synthesized sequence

<400> 130

atgggaggtt ggtcttccaa acctcggaaa ggcattgggga cgaatctttc tgttcccaat 60

# Sequence Listing.txt

```

cctctgggat tctttcccgga tcaccagttg gaccctgcgt tcggagccaa ctcaaacaat 120
ccagattggg gcggccgcgc gcaacacgat gaagccgtag acaacaaatt caacaaagaa 180
caacaaaacg cgttctatga gatcttacat ttacctaaact taaacgaaga acaacgaaac 240
gccttcatcc aaagttttaa agatgaccca agccaaagcg ctaacctttt agcagaagct 300
aaaaagctaa atgatgtctca ggcgcccga aa gtagacaaca aattcaacaa agaacaacaa 360
aacgcgttct atgagatctt acattttacct aacttaaacy aagaacaacy aaacgccttc 420
atccaaagtt taaaagatga cccaagccaa agcgctaacc ttttagcaga agctaaaaag 480
ctaaatgatg ctcaggcgcc gaaagcggcc gcccctgcac cgaacatgga gaacacaaca 540
tcaggattcc taggacctct gctcgtgta caggcggggt ttttcttgtt gacaagaatc 600
ctcacaatac cacagagtct agactcgtgg tggacttctc tcaattttct agggggagca 660
cccacgtgtc ctggccaaaa ttcgcagtcc ccaacctcca atcactcacc aacctcttgt 720
cctccaattt gtcttggtta tcgctggatg tgtctgcggc gttttatcat attcctcttc 780
atcctgtctg tatgcctcat ctcttcttg gttcttctg actaccaagg tatgttgccc 840
gtttgtcctc tacttccagg aacatcaacc accagcacgg ggccatgcaa gacctgcacg 900
attcctgtct aaggaacctc tatgtttccc tcttggtgtc gtacaaaacc ttcggacaga 960
aactgcactt gtattcccat cccatcatcc tgggctttcg caagattcct atgggagtgg 1020
gcctcagtcc gtttctcctg gctcagttta ctagtgccat ttgttcagt gttcgtaggg 1080
ctttcccca ctgtttggct ttcagttata tggatgatgt ggtattgggg gccaaagtctg 1140
tacaacatct tgagtcctt tttacctcta ttaccaattt tcttttgtct ttgggtatac 1200
att

```

<210> 131

<211> 401

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 131

```

Met Gly Gly Trp Ser Ser Lys Pro Arg Lys Gly Met Gly Thr Asn Leu
 1          5          10          15
Ser Val Pro Asn Pro Leu Gly Phe Phe Pro Asp His Gln Leu Asp Pro
          20          25          30
Ala Phe Gly Ala Asn Ser Asn Asn Pro Asp Trp Gly Gly Arg Ala Gln
          35          40          45
His Asp Glu Ala Val Asp Asn Lys Phe Asn Lys Glu Gln Gln Asn Ala
          50          55          60
Phe Tyr Glu Ile Leu His Leu Pro Asn Leu Asn Glu Glu Gln Arg Asn
          65          70          75          80
Ala Phe Ile Gln Ser Leu Lys Asp Asp Pro Ser Gln Ser Ala Asn Leu
          85          90          95
Leu Ala Glu Ala Lys Lys Leu Asn Asp Ala Gln Ala Pro Lys Val Asp
          100          105          110
Asn Lys Phe Asn Lys Glu Gln Gln Asn Ala Phe Tyr Glu Ile Leu His
          115          120          125
Leu Pro Asn Leu Asn Glu Glu Gln Arg Asn Ala Phe Ile Gln Ser Leu
          130          135          140
Lys Asp Asp Pro Ser Gln Ser Ala Asn Leu Leu Ala Glu Ala Lys Lys
          145          150          155          160
Leu Asn Asp Ala Gln Ala Pro Lys Ala Ala Ala Pro Ala Pro Asn Met

```

## Sequence Listing.txt

165  
 Glu Asn Thr Thr Ser Gly Phe Leu Gly Pro Leu Leu Val Leu Gln Ala  
 180 185 190  
 Gly Phe Phe Leu Leu Thr Arg Ile Leu Thr Ile Pro Gln Ser Leu Asp  
 195 200 205  
 Ser Trp Trp Thr Ser Leu Asn Phe Leu Gly Gly Ala Pro Thr Cys Pro  
 210 215 220  
 Gly Gln Asn Ser Gln Ser Pro Thr Ser Asn His Ser Pro Thr Ser Cys  
 225 230 235 240  
 Pro Pro Ile Cys Pro Gly Tyr Arg Trp Met Cys Leu Arg Arg Phe Ile  
 245 250 255  
 Ile Phe Leu Phe Ile Leu Leu Leu Cys Leu Ile Phe Leu Leu Val Leu  
 260 265 270  
 Leu Asp Tyr Gln Gly Met Leu Pro Val Cys Pro Leu Leu Pro Gly Thr  
 275 280 285  
 Ser Thr Thr Ser Thr Gly Pro Cys Lys Thr Cys Thr Ile Pro Ala Gln  
 290 295 300  
 Gly Thr Ser Met Phe Pro Ser Cys Cys Cys Thr Lys Pro Ser Asp Arg  
 305 310 315 320  
 Asn Cys Thr Cys Ile Pro Ile Pro Ser Ser Trp Ala Phe Ala Arg Phe  
 325 330 335  
 Leu Trp Glu Trp Ala Ser Val Arg Phe Ser Trp Leu Ser Leu Leu Val  
 340 345 350  
 Pro Phe Val Gln Trp Phe Val Gly Leu Ser Pro Thr Val Trp Leu Ser  
 355 360 365  
 Val Ile Trp Met Met Trp Tyr Trp Gly Pro Ser Leu Tyr Asn Ile Leu  
 370 375 380  
 Ser Pro Phe Leu Pro Leu Leu Pro Ile Phe Phe Cys Leu Trp Val Tyr  
 385 390 395 400  
 Ile

&lt;210&gt; 132

&lt;211&gt; 1203

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence:Artificially synthesized sequence

&lt;400&gt; 132

```

atgggagggtt ggtcttccaa acctcggaaa ggcattgggga cgaatctttc tgttcccaat 60
cctctgggat tctttcccga tcaccagttg gaccctgcgt tcggagccaa ctcaaacaat 120
ccagattggg gcggccgcgc gcaacacgat gaagccgtag acaacaaatt caacaaagaa 180
caacaaaacg cgttctatga gatcttacat ttacctaaact taaacgaaga acaacgaaac 240
gccttcatcc aaagtttaaa agatgaccca agccaaagcg ctaacctttt agcagaagct 300

```

# Sequence Listing.txt

```

aaaaagctaa atgatgctca ggcgccgaaa gtagacaaca aattcaacaa agaacaacaa 360
aacgcgttct atgagatctt acattttacct aacttaaacg aagaacaacg aaacgccttc 420
atccaaagtt taaaagatga cccaagccaa agcgctaacc ttttagcaga agctaaaaag 480
ctaaatgatg ctacaggcgcc gaaagcggcc gcccctgcac cgaacatgga gaacacaaca 540
tcaggattcc taggacccct gctcgtgtta caggcggggt ttttcttgtt gacaagaatc 600
ctcacaatac cacagagtct agactcgtgg tggacttctc tcaattttct agggggagca 660
cccacgtgct ctggccaaaa ttcgcagtcc ccaacctcca atcactcacc aacctcttgt 720
cctccaattt gtcctggcta tcgctggatg tgtctgcggc gttttatcat attcctcttc 780
atcctgctgc tatgcctcat ctcttgttg gttcttctgg actaccaagg tatgttgccc 840
gtttgtcctc tacttccagg aacatcaacc accagcacgg ggccatgcaa gacctgcacg 900
attcctgctc gaggaacctc tatgtttccc tcttggtgct gtacaaaacc ttcggacaga 960
aactgcactt gtattcccat cccatcatcc tgggcttctg caagattcct atgggagtgg 1020
gcctcagtcg gtttctcctg gctcagttta ctagtgccat ttgttcagtg gttcgtaggg 1080
ctttccccc ctgtttggct ttcagttata tggatgatgt ggtattggg gccaaagtctg 1140
tacaacatct tgagtccctt tttacctcta ttaccaattt tcttttgtct ttgggtatac 1200
att 1203

```

<210> 133  
 <211> 401  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence:Artificially  
 synthesized sequence

<400> 133  
 Met Gly Gly Trp Ser Ser Lys Pro Arg Lys Gly Met Gly Thr Asn Leu  
 1 5 10 15  
 Ser Val Pro Asn Pro Leu Gly Phe Phe Pro Asp His Gln Leu Asp Pro  
 20 25 30  
 Ala Phe Gly Ala Asn Ser Asn Asn Pro Asp Trp Gly Gly Arg Ala Gln  
 35 40 45  
 His Asp Glu Ala Val Asp Asn Lys Phe Asn Lys Glu Gln Gln Asn Ala  
 50 55 60  
 Phe Tyr Glu Ile Leu His Leu Pro Asn Leu Asn Glu Glu Gln Arg Asn  
 65 70 75 80  
 Ala Phe Ile Gln Ser Leu Lys Asp Asp Pro Ser Gln Ser Ala Asn Leu  
 85 90 95  
 Leu Ala Glu Ala Lys Lys Leu Asn Asp Ala Gln Ala Pro Lys Val Asp  
 100 105 110  
 Asn Lys Phe Asn Lys Glu Gln Gln Asn Ala Phe Tyr Glu Ile Leu His  
 115 120 125  
 Leu Pro Asn Leu Asn Glu Glu Gln Arg Asn Ala Phe Ile Gln Ser Leu  
 130 135 140  
 Lys Asp Asp Pro Ser Gln Ser Ala Asn Leu Leu Ala Glu Ala Lys Lys  
 145 150 155 160  
 Leu Asn Asp Ala Gln Ala Pro Lys Ala Ala Ala Pro Ala Pro Asn Met  
 165 170 175  
 Glu Asn Thr Thr Ser Gly Phe Leu Gly Pro Leu Leu Val Leu Gln Ala  
 180 185 190

# Sequence Listing.txt

Gly Phe Phe Leu Leu Thr Arg Ile Leu Thr Ile Pro Gln Ser Leu Asp  
195 200 205  
Ser Trp Trp Thr Ser Leu Asn Phe Leu Gly Gly Ala Pro Thr Cys Pro  
210 215 220  
Gly Gln Asn Ser Gln Ser Pro Thr Ser Asn His Ser Pro Thr Ser Cys  
225 230 235 240  
Pro Pro Ile Cys Pro Gly Tyr Arg Trp Met Cys Leu Arg Arg Phe Ile  
245 250 255  
Ile Phe Leu Phe Ile Leu Leu Leu Cys Leu Ile Phe Leu Leu Val Leu  
260 265 270  
Leu Asp Tyr Gln Gly Met Leu Pro Val Cys Pro Leu Leu Pro Gly Thr  
275 280 285  
Ser Thr Thr Ser Thr Gly Pro Cys Lys Thr Cys Thr Ile Pro Ala Arg  
290 295 300  
Gly Thr Ser Met Phe Pro Ser Cys Cys Cys Thr Lys Pro Ser Asp Arg  
305 310 315 320  
Asn Cys Thr Cys Ile Pro Ile Pro Ser Ser Trp Ala Phe Ala Arg Phe  
325 330 335  
Leu Trp Glu Trp Ala Ser Val Arg Phe Ser Trp Leu Ser Leu Leu Val  
340 345 350  
Pro Phe Val Gln Trp Phe Val Gly Leu Ser Pro Thr Val Trp Leu Ser  
355 360 365  
Val Ile Trp Met Met Trp Tyr Trp Gly Pro Ser Leu Tyr Asn Ile Leu  
370 375 380  
Ser Pro Phe Leu Pro Leu Leu Pro Ile Phe Phe Cys Leu Trp Val Tyr  
385 390 395 400  
Ile

<210> 134

<211> 1002

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially  
synthesized sequence

<400> 134

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| atgggagggt | ggctctccaa | acctcggaaa | ggcatgggga | cgaatctttc | tgttcccaat | 60  |
| cctctgggat | tccttcccga | tcaccagtgt | gaccctgcgt | tcggagccaa | ctcaaacaat | 120 |
| ccagattggg | gcggccgcat | gaactctgat | tccgaatgcc | cgctgtctca | tgacggttac | 180 |
| tgcctgcatg | atggcgtatg | catgtacatc | gaagctctgg | acaaatacgc | atgcaactgt | 240 |
| gttgtaggtt | acatcggcga | acgttgccag | tatcgcgacc | tgaaatgggt | ggaactgcgt | 300 |
| aaggcggccg | cccctgcacc | gaacatggag | aacacaacat | caggattcct | aggacccttg | 360 |
| ctcgtgttac | aggcgggggt | tttcttggtg | acaagaatcc | tcacaatacc | acagagtcta | 420 |
| gactcgtggg | ggacttctct | caattttcta | gggggagcac | ccacgtgtcc | tggccaaaat | 480 |
| tcgcagtccc | caacctccaa | tcactcacca | acctcttgtc | ctccaatttg | tcctggctat | 540 |

# Sequence Listing.txt

```

cgctggatgt gtctgcggcg ttttatcata ttcctcttca tcctgctgct atgcctcatc 600
ttcttggttg ttcttctgga ctaccaaggt atgttgcccg tttgtcctct acttccagga 660
acatcaacca ccagcacggg gccatgcaag acctgcacga ttcctgctca aggaacctct 720
atgtttccct cttgttgctg tacaaaacct tcggacggaa actgcacttg tattcccatc 780
ccatcatcct gggctttcgc aagattccta tgggagtggg cctcagtcgg tttctcctgg 840
ctcagtttac tagtgccatt tggtcagtg ttcgtagggc tttccccac tgtttggtt 900
tcagttatat ggatgatgtg gtattggggg ccaagtctgt acaacatctt gagtcccttt 960
ttacctctat taccaatttt cttttgtctt tgggtataca tt 1002

```

<210> 135

<211> 334

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially  
synthesized sequence

<400> 135

Met Gly Gly Trp Ser Ser Lys Pro Arg Lys Gly Met Gly Thr Asn Leu  
1 5 10 15

Ser Val Pro Asn Pro Leu Gly Phe Phe Pro Asp His Gln Leu Asp Pro  
20 25 30

Ala Phe Gly Ala Asn Ser Asn Asn Pro Asp Trp Gly Gly Arg Met Asn  
35 40 45

Ser Asp Ser Glu Cys Pro Leu Ser His Asp Gly Tyr Cys Leu His Asp  
50 55 60

Gly Val Cys Met Tyr Ile Glu Ala Leu Asp Lys Tyr Ala Cys Asn Cys  
65 70 75 80

Val Val Gly Tyr Ile Gly Glu Arg Cys Gln Tyr Arg Asp Leu Lys Trp  
85 90 95

Trp Glu Leu Arg Lys Ala Ala Ala Pro Ala Pro Asn Met Glu Asn Thr  
100 105 110

Thr Ser Gly Phe Leu Gly Pro Leu Val Leu Gln Ala Gly Phe Phe  
115 120 125

Leu Leu Thr Arg Ile Leu Thr Ile Pro Gln Ser Leu Asp Ser Trp Trp  
130 135 140

Thr Ser Leu Asn Phe Leu Gly Gly Ala Pro Thr Cys Pro Gly Gln Asn  
145 150 155 160

Ser Gln Ser Pro Thr Ser Asn His Ser Pro Thr Ser Cys Pro Pro Ile  
165 170 175

Cys Pro Gly Tyr Arg Trp Met Cys Leu Arg Arg Phe Ile Ile Phe Leu  
180 185 190

Phe Ile Leu Leu Leu Cys Leu Ile Phe Leu Leu Val Leu Leu Asp Tyr  
195 200 205

Gln Gly Met Leu Pro Val Cys Pro Leu Leu Pro Gly Thr Ser Thr Thr  
210 215 220

Ser Thr Gly Pro Cys Lys Thr Cys Thr Ile Pro Ala Gln Gly Thr Ser  
Page 95

| Sequence Listing.txt |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |
|----------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| 225                  |            |            |            |            | 230        |            |            |            |            | 235        |            |            |            |            | 240        |
| Met                  | Phe        | Pro        | Ser        | Cys<br>245 | Cys        | Cys        | Thr        | Lys        | Pro<br>250 | Ser        | Asp        | Gly        | Asn        | Cys<br>255 | Thr        |
| Cys                  | Ile        | Pro        | Ile<br>260 | Pro        | Ser        | Ser        | Trp        | Ala<br>265 | Phe        | Ala        | Arg        | Phe        | Leu<br>270 | Trp        | Glu        |
| Trp                  | Ala        | Ser<br>275 | Val        | Arg        | Phe        | Ser        | Trp<br>280 | Leu        | Ser        | Leu        | Leu        | Val<br>285 | Pro        | Phe        | Val        |
| Gln                  | Trp<br>290 | Phe        | Val        | Gly        | Leu        | Ser<br>295 | Pro        | Thr        | Val        | Trp        | Leu<br>300 | Ser        | Val        | Ile        | Trp        |
| Met<br>305           | Met        | Trp        | Tyr        | Trp        | Gly<br>310 | Pro        | Ser        | Leu        | Tyr        | Asn<br>315 | Ile        | Leu        | Ser        | Pro        | Phe<br>320 |
| Leu                  | Pro        | Leu        | Leu        | Pro<br>325 | Ile        | Phe        | Phe        | Cys        | Leu<br>330 | Trp        | Val        | Tyr        | Ile        |            |            |

<210> 136  
<211> 1002  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Artificially synthesized sequence

| <400> 136  |             |             |             |            |            |      |  |
|------------|-------------|-------------|-------------|------------|------------|------|--|
| atgggaggtt | ggtcttccaa  | acctcggaaa  | ggcatgggga  | cgaatctttc | tgttcccaat | 60   |  |
| cctctgggat | tctttcccga  | tcaccagttg  | gaccctgcgt  | tcggagccaa | ctcaaacaat | 120  |  |
| ccagattggg | gcggccgcgt  | gaactctgat  | tccgaatgcc  | cgctgtctca | tgacggttac | 180  |  |
| tgctgtatg  | atggcgtatg  | catgtacatc  | gaagctctgg  | acaaatacgc | atgcaactgt | 240  |  |
| gttgtaggtt | acatcggcga  | acgttgccag  | tatcgcgac   | tgaaatgggt | ggaactgcgt | 300  |  |
| aaggcggccg | cccctgcacc  | gaacatggag  | aacacaaat   | caggattcct | aggacccctg | 360  |  |
| ctcgtgttac | aggcgggggt  | tttcttgttg  | acaagaatcc  | tcacaatacc | acagagtcta | 420  |  |
| gactcgtggt | ggactttctt  | caatttttcta | ggggggagcac | ccacgtgtcc | tggccaaaat | 480  |  |
| tcgcagtccc | caacctccaa  | tcactcacca  | acctctttgtc | ctccaatttg | tcctggctat | 540  |  |
| cgctggatgt | gtctgcggcg  | ttttatcata  | ttctctttca  | tcctgtctgt | atgcctcatc | 600  |  |
| ttcttgttgg | ttctttctgga | ctaccaaggt  | atgttgcccg  | tttgtcctct | acttcaggga | 660  |  |
| acatcaacca | ccagcacggg  | gccatgcaag  | acctgcacga  | ttcctgtctg | aggaaacctt | 720  |  |
| atgtttccct | cttgttgctg  | tacaaaacct  | tcggacggaa  | actgcacttg | tattcccata | 780  |  |
| ccatcatctt | gggctttcgc  | aagatttcta  | tgggagtggg  | cctcagtcgg | tttctccttg | 840  |  |
| ctcagtttac | tagtgccatt  | tgttcagtg   | ctcgtagggc  | tttccccac  | tgtttggtt  | 900  |  |
| tcagttatat | ggatgatgtg  | gtattggggg  | ccaagtctgt  | acaacatctt | gagtcctttt | 960  |  |
| ttacctctat | taccaatttt  | cttttggtctt | tgggtataca  | tt         |            | 1002 |  |

```
<210> 137
<211> 334
<212> PRT
<213> Artificial Sequence
```

```
<220>
<223> Description of Artificial Sequence:Artificially
        synthesized sequence
```

<400> 137  
Met Gly Gly Trp Ser Ser Lys Pro Arg Lys Gly Met Gly Thr Asn Leu  
1 5 10 15



## Sequence Listing.txt

Ser Val Pro Asn Pro Leu Gly Phe Phe Pro Asp His Gln Leu Asp Pro  
 20 25 30  
 Ala Phe Gly Ala Asn Ser Asn Asn Pro Asp Trp Gly Gly Arg Met Asn  
 35 40 45  
 Ser Asp Ser Glu Cys Pro Leu Ser His Asp Gly Tyr Cys Leu His Asp  
 50 55 60  
 Gly Val Cys Met Tyr Ile Glu Ala Leu Asp Lys Tyr Ala Cys Asn Cys  
 65 70 75 80  
 Val Val Gly Tyr Ile Gly Glu Arg Cys Gln Tyr Arg Asp Leu Lys Trp  
 85 90 95  
 Trp Glu Leu Arg Lys Ala Ala Ala Pro Ala Pro Asn Met Glu Asn Thr  
 100 105 110  
 Thr Ser Gly Phe Leu Gly Pro Leu Leu Val Leu Gln Ala Gly Phe Phe  
 115 120 125  
 Leu Leu Thr Arg Ile Leu Thr Ile Pro Gln Ser Leu Asp Ser Trp Trp  
 130 135 140  
 Thr Ser Leu Asn Phe Leu Gly Gly Ala Pro Thr Cys Pro Gly Gln Asn  
 145 150 155 160  
 Ser Gln Ser Pro Thr Ser Asn His Ser Pro Thr Ser Cys Pro Pro Ile  
 165 170 175  
 Cys Pro Gly Tyr Arg Trp Met Cys Leu Arg Arg Phe Ile Ile Phe Leu  
 180 185 190  
 Phe Ile Leu Leu Leu Cys Leu Ile Phe Leu Leu Val Leu Leu Asp Tyr  
 195 200 205  
 Gln Gly Met Leu Pro Val Cys Pro Leu Leu Pro Gly Thr Ser Thr Thr  
 210 215 220  
 Ser Thr Gly Pro Cys Lys Thr Cys Thr Ile Pro Ala Arg Gly Thr Ser  
 225 230 235 240  
 Met Phe Pro Ser Cys Cys Cys Thr Lys Pro Ser Asp Gly Asn Cys Thr  
 245 250 255  
 Cys Ile Pro Ile Pro Ser Ser Trp Ala Phe Ala Arg Phe Leu Trp Glu  
 260 265 270  
 Trp Ala Ser Val Arg Phe Ser Trp Leu Ser Leu Leu Val Pro Phe Val  
 275 280 285  
 Gln Trp Phe Val Gly Leu Ser Pro Thr Val Trp Leu Ser Val Ile Trp  
 290 295 300  
 Met Met Trp Tyr Trp Gly Pro Ser Leu Tyr Asn Ile Leu Ser Pro Phe  
 305 310 315 320  
 Leu Pro Leu Leu Pro Ile Phe Phe Cys Leu Trp Val Tyr Ile  
 325 330

<210> 138  
 <211> 1002

# Sequence Listing.txt

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 138

```
atgggaggtt ggtcttccaa acctcggaaa ggcattggga cgaatctttc tgttcccaat 60
cctctgggat tctttcccga tcaccagttg gaccctgcgt tcggagccaa ctcaaacaat 120
ccagattggg gcggccgcat gaactctgat tccgaatgcc cgctgtctca tgacggttac 180
tgcctgcatg atggcgatg catgtacatc gaagctctgg acaaatacgc atgcaactgt 240
gttgtaggtt acatcggcga acgttgccag tatcgcgacc tgaaatgggt ggaactgcgt 300
aaggcgcccg cccctgcacc gaacatggag aacacaacat caggattcct aggacccttg 360
ctcgtgttac aggcgggggt tttcttggtg acaagaatcc tcacaatacc acagagtcta 420
gactcgtggt ggacttctct caattttcta gggggagcac ccacgtgtcc tggccaaaat 480
tcgcagtcct caacctccaa tcaatcacca acctcttgct ctccaatttg tcctggctat 540
cgctggatgt gtctgcggcg ttttatcata ttcctcttca tcctgctgct atgcctcatc 600
ttcttggttg ttcttctgga ctaccaaggt atgttgcccg tttgtcctct acttccagga 660
acatcaacca ccagcacggg gccatgcaag acctgcacga ttcctgctca aggaacctct 720
atgtttccct cttgttgctg taaaaaacct tcggacagaa actgcacttg tattcccatc 780
ccatcatcct gggctttcgc aagattccta tgggagtggg cctcagtcct tttctcctgg 840
ctcagtttac tagtgccatt tgttcagttg ttcgtagggc tttccccac tgtttggtt 900
tcagttatat ggatgatgtg gtattggggg ccaagtctgt acaacatctt gagtcccttt 960
ttacctctat taccaatttt ctttgtctt tgggtatata tt 1002
```

<210> 139

<211> 334

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 139

```
Met Gly Gly Trp Ser Ser Lys Pro Arg Lys Gly Met Gly Thr Asn Leu
 1          5          10          15
Ser Val Pro Asn Pro Leu Gly Phe Phe Pro Asp His Gln Leu Asp Pro
          20          25          30
Ala Phe Gly Ala Asn Ser Asn Asn Pro Asp Trp Gly Gly Arg Met Asn
          35          40          45
Ser Asp Ser Glu Cys Pro Leu Ser His Asp Gly Tyr Cys Leu His Asp
          50          55          60
Gly Val Cys Met Tyr Ile Glu Ala Leu Asp Lys Tyr Ala Cys Asn Cys
          65          70          75          80
Val Val Gly Tyr Ile Gly Glu Arg Cys Gln Tyr Arg Asp Leu Lys Trp
          85          90          95
Trp Glu Leu Arg Lys Ala Ala Ala Pro Ala Pro Asn Met Glu Asn Thr
          100          105          110
Thr Ser Gly Phe Leu Gly Pro Leu Val Leu Gln Ala Gly Phe Phe
          115          120          125
Leu Leu Thr Arg Ile Leu Thr Ile Pro Gln Ser Leu Asp Ser Trp Trp
          130          135          140
```

# Sequence Listing.txt

Thr Ser Leu Asn Phe Leu Gly Gly Ala Pro Thr Cys Pro Gly Gln Asn  
145 150 155 160

Ser Gln Ser Pro Thr Ser Asn His Ser Pro Thr Ser Cys Pro Pro Ile  
165 170 175

Cys Pro Gly Tyr Arg Trp Met Cys Leu Arg Arg Phe Ile Ile Phe Leu  
180 185 190

Phe Ile Leu Leu Leu Cys Leu Ile Phe Leu Leu Val Leu Leu Asp Tyr  
195 200 205

Gln Gly Met Leu Pro Val Cys Pro Leu Leu Pro Gly Thr Ser Thr Thr  
210 215 220

Ser Thr Gly Pro Cys Lys Thr Cys Thr Ile Pro Ala Gln Gly Thr Ser  
225 230 235 240

Met Phe Pro Ser Cys Cys Cys Thr Lys Pro Ser Asp Arg Asn Cys Thr  
245 250 255

Cys Ile Pro Ile Pro Ser Ser Trp Ala Phe Ala Arg Phe Leu Trp Glu  
260 265 270

Trp Ala Ser Val Arg Phe Ser Trp Leu Ser Leu Leu Val Pro Phe Val  
275 280 285

Gln Trp Phe Val Gly Leu Ser Pro Thr Val Trp Leu Ser Val Ile Trp  
290 295 300

Met Met Trp Tyr Trp Gly Pro Ser Leu Tyr Asn Ile Leu Ser Pro Phe  
305 310 315 320

Leu Pro Leu Leu Pro Ile Phe Phe Cys Leu Trp Val Tyr Ile  
325 330

<210> 140

<211> 1002

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially  
synthesized sequence

<400> 140

```
atgggaggtt ggtcttccaa acctcggaaa ggcatgggga cgaatctttc tgttcccaat 60
cctctgggat tctttcccga tcaccagttg gaccctgcgt tcggagccaa ctcaaacaat 120
ccagattggg gcggccgcat gaactctgat tccgaatgcc cgctgtctca tgacggttac 180
tgcctgcatg atggcgtatg catgtacatc gaagctctgg acaaatacgc atgcaactgt 240
gttgtagggt acatcggcga acgttgccag tatcgcgacc tgaaatgggt ggaactgcgt 300
aaggcggccg cccctgcacc gaacatggag aacacaacat caggattcct aggaccctg 360
ctcgtgttac aggcgggggt tttcttggtg acaagaatcc tcacaatacc acagagtcta 420
gactcgtggt ggacttctct caattttcta gggggagcac ccacgtgtcc tggccaaaat 480
tcgcagtccc caacctccaa tcactcacca acctctgtc ctccaatttg tcctggctat 540
cgctggatgt gtctgcggcg ttttatcata ttcctcttca tcctgctgct atgcctcatc 600
ttcttggttg ttcttctgga ctaccaaggt atgttgcccc tttgtcctct acttccagga 660
acatcaacca ccagcacggg gccatgcaag acctgcacga ttcctgctcg aggaacctct 720
atgtttccct cttgttgctg tacaaaacct tcggacagaa actgcacttg tattcccatc 780
ccatcatcct gggctttcgc aagattccta tgggagtggg cctcagtcgg tttctcctgg 840
ctcagtttac tagtgccatt tgttcagtgg ttcgtagggc tttcccccac tgtttgctt 900
```

## Sequence Listing.txt

tcagttatat ggatgatgtg gatttggggg ccaagtctgt acaacatctt gagtcccttt 960  
 ttacctctat taccaatttt cttttgtctt tgggtataca tt 1002

<210> 141

<211> 334

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially  
 synthesized sequence

<400> 141

Met Gly Gly Trp Ser Ser Lys Pro Arg Lys Gly Met Gly Thr Asn Leu  
 1 5 10 15

Ser Val Pro Asn Pro Leu Gly Phe Phe Pro Asp His Gln Leu Asp Pro  
 20 25 30

Ala Phe Gly Ala Asn Ser Asn Asn Pro Asp Trp Gly Gly Arg Met Asn  
 35 40 45

Ser Asp Ser Glu Cys Pro Leu Ser His Asp Gly Tyr Cys Leu His Asp  
 50 55 60

Gly Val Cys Met Tyr Ile Glu Ala Leu Asp Lys Tyr Ala Cys Asn Cys  
 65 70 75 80

Val Val Gly Tyr Ile Gly Glu Arg Cys Gln Tyr Arg Asp Leu Lys Trp  
 85 90 95

Trp Glu Leu Arg Lys Ala Ala Ala Pro Ala Pro Asn Met Glu Asn Thr  
 100 105 110

Thr Ser Gly Phe Leu Gly Pro Leu Leu Val Leu Gln Ala Gly Phe Phe  
 115 120 125

Leu Leu Thr Arg Ile Leu Thr Ile Pro Gln Ser Leu Asp Ser Trp Trp  
 130 135 140

Thr Ser Leu Asn Phe Leu Gly Gly Ala Pro Thr Cys Pro Gly Gln Asn  
 145 150 155 160

Ser Gln Ser Pro Thr Ser Asn His Ser Pro Thr Ser Cys Pro Pro Ile  
 165 170 175

Cys Pro Gly Tyr Arg Trp Met Cys Leu Arg Arg Phe Ile Ile Phe Leu  
 180 185 190

Phe Ile Leu Leu Leu Cys Leu Ile Phe Leu Leu Val Leu Leu Asp Tyr  
 195 200 205

Gln Gly Met Leu Pro Val Cys Pro Leu Leu Pro Gly Thr Ser Thr Thr  
 210 215 220

Ser Thr Gly Pro Cys Lys Thr Cys Thr Ile Pro Ala Arg Gly Thr Ser  
 225 230 235 240

Met Phe Pro Ser Cys Cys Cys Thr Lys Pro Ser Asp Arg Asn Cys Thr  
 245 250 255

Cys Ile Pro Ile Pro Ser Ser Trp Ala Phe Ala Arg Phe Leu Trp Glu  
 Page 100

Sequence Listing.txt

260

265

270

Trp Ala Ser Val Arg Phe Ser Trp Leu Ser Leu Leu Val Pro Phe Val  
 275 280 285  
 Gln Trp Phe Val Gly Leu Ser Pro Thr Val Trp Leu Ser Val Ile Trp  
 290 295 300  
 Met Met Trp Tyr Trp Gly Pro Ser Leu Tyr Asn Ile Leu Ser Pro Phe  
 305 310 315 320  
 Leu Pro Leu Leu Pro Ile Phe Phe Cys Leu Trp Val Tyr Ile  
 325 330

<210> 142

<211> 861

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially  
 synthesized sequence

<400> 142

|             |            |            |            |            |             |     |
|-------------|------------|------------|------------|------------|-------------|-----|
| atgggagggtt | ggtcttccaa | acctcggaaa | ggcatgggga | cgaatctttc | tgttcccaat  | 60  |
| cctctgggat  | tctttcccga | tcaccagttg | gaccctgcgt | tcggagccaa | ctcaaacaat  | 120 |
| ccagattggg  | gcggccgctg | gagccaccgc | cagttcgaaa | aagcggccgc | ccctgcaccg  | 180 |
| aacatggaga  | acacaacatc | aggattccta | ggacccctgc | tcgtgttaca | ggcggggttt  | 240 |
| ttcttggtga  | caagaatcct | cacaatacca | cagagtctag | actcgtggtg | gacttctctc  | 300 |
| aattttctag  | ggggagcacc | cacgtgtcct | ggccaaaatt | cgcagtcccc | aacctccaat  | 360 |
| cactcaccaa  | cctcttgctc | tccaatttgt | cctggctatc | gctggatgtg | tctgcggcgt  | 420 |
| tttatcatat  | tcctcttcat | cctgctgcta | tgcctcatct | tcttggttgt | tcttctggac  | 480 |
| taccaaggta  | tggtgcccgt | ttgtcctcta | cttccaggaa | catcaaccac | cagcacgggg  | 540 |
| ccatgcaaga  | cctgcacgat | tcctgctcaa | ggaacctcta | tgtttccctc | ttggtgctgt  | 600 |
| acaaaacctt  | cggacggaaa | ctgcacttgt | attcccatcc | catcatcctg | ggcttttcgca | 660 |
| agatttcctat | gggagtgggc | ctcagtcctg | ttctcctggc | tcagtttact | agtgccattt  | 720 |
| gttcagtggg  | tcgtagggct | ttccccctct | gtttggcttt | cagttatatg | gatgatgtgg  | 780 |
| tattgggggc  | caagtctgta | caacatcttg | agtccctttt | tacctctatt | accaattttt  | 840 |
| ttttgtcttt  | gggtatacat | t          |            |            |             | 861 |

<210> 143

<211> 287

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially  
 synthesized sequence

<400> 143

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Met | Gly | Gly | Trp | Ser | Ser | Lys | Pro | Arg | Lys | Gly | Met | Gly | Thr | Asn | Leu |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Ser | Val | Pro | Asn | Pro | Leu | Gly | Phe | Phe | Pro | Asp | His | Gln | Leu | Asp | Pro |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Ala | Phe | Gly | Ala | Asn | Ser | Asn | Asn | Pro | Asp | Trp | Gly | Gly | Arg | Trp | Ser |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| His | Pro | Gln | Phe | Glu | Lys | Ala | Ala | Ala | Pro | Ala | Pro | Asn | Met | Glu | Asn |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |

# Sequence Listing.txt

Thr Thr Ser Gly Phe Leu Gly Pro Leu Leu Val Leu Gln Ala Gly Phe  
 65 70 75 80  
 Phe Leu Leu Thr Arg Ile Leu Thr Ile Pro Gln Ser Leu Asp Ser Trp  
 85 90 95  
 Trp Thr Ser Leu Asn Phe Leu Gly Gly Ala Pro Thr Cys Pro Gly Gln  
 100 105 110  
 Asn Ser Gln Ser Pro Thr Ser Asn His Ser Pro Thr Ser Cys Pro Pro  
 115 120 125  
 Ile Cys Pro Gly Tyr Arg Trp Met Cys Leu Arg Arg Phe Ile Ile Phe  
 130 135 140  
 Leu Phe Ile Leu Leu Leu Cys Leu Ile Phe Leu Leu Val Leu Leu Asp  
 145 150 155 160  
 Tyr Gln Gly Met Leu Pro Val Cys Pro Leu Leu Pro Gly Thr Ser Thr  
 165 170 175  
 Thr Ser Thr Gly Pro Cys Lys Thr Cys Thr Ile Pro Ala Gln Gly Thr  
 180 185 190  
 Ser Met Phe Pro Ser Cys Cys Cys Thr Lys Pro Ser Asp Gly Asn Cys  
 195 200 205  
 Thr Cys Ile Pro Ile Pro Ser Ser Trp Ala Phe Ala Arg Phe Leu Trp  
 210 215 220  
 Glu Trp Ala Ser Val Arg Phe Ser Trp Leu Ser Leu Leu Val Pro Phe  
 225 230 235 240  
 Val Gln Trp Phe Val Gly Leu Ser Pro Thr Val Trp Leu Ser Val Ile  
 245 250 255  
 Trp Met Met Trp Tyr Trp Gly Pro Ser Leu Tyr Asn Ile Leu Ser Pro  
 260 265 270  
 Phe Leu Pro Leu Leu Pro Ile Phe Phe Cys Leu Trp Val Tyr Ile  
 275 280 285

<210> 144

<211> 861

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 144

atgggagggtt ggtcttccaa acctcggaaa ggcattgggga cgaatctttc tgttcccaat 60  
 cctctgggat tctttccga tcaccagttg gaccctgcgt tcggagccaa ctcaaacaat 120  
 ccagattggg gcggccgctg gagccaccg cagttcgaaa aagcggccgc ccctgcaccg 180  
 aacatggaga acacaacatc aggattccta ggacccctgc tcgtgttaca ggcgggggtt 240  
 ttcttgttga caagaatcct cacaatacca cagagtctag actcgtggtg gacttctctc 300  
 aattttctag ggggagcacc cacgtgtcct ggccaaaatt cgcagtcccc aacctccaat 360  
 cactaccaa cctctgttcc tccaatttgt cctggctatc gctggatgtg tctgcggcgt 420  
 tttatcatat tcctcttcat cctgctgcta tgcctcatct tcttgttggt tcttctggac 480  
 taccaaggta tgttgcccgt ttgtcctcta cttccaggaa catcaaccac cagcacgggg 540

# Sequence Listing.txt

```
ccatgcaaga cctgcacgat tcctgctcga ggaacctcta tgttccctc ttgttgctgt 600
acaaaacctt cggacggaaa ctgcacttgt attcccatcc catcatcctg ggctttcgca 660
agattcctat gggagtgggc ctgagtcctg ttctcctggc tcagtttact agtgccattt 720
gttcagtggg tcgtagggct ttcccccact gtttggtctt cagttatatg gatgatgtgg 780
tattgggggc caagtctgta caacatcttg agtccctttt tacctctatt accaattttc 840
ttttgtcttt gggtatacat t 861
```

<210> 145

<211> 287

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 145

Met Gly Gly Trp Ser Ser Lys Pro Arg Lys Gly Met Gly Thr Asn Leu  
1 5 10 15

Ser Val Pro Asn Pro Leu Gly Phe Phe Pro Asp His Gln Leu Asp Pro  
20 25 30

Ala Phe Gly Ala Asn Ser Asn Asn Pro Asp Trp Gly Gly Arg Trp Ser  
35 40 45

His Pro Gln Phe Glu Lys Ala Ala Ala Pro Ala Pro Asn Met Glu Asn  
50 55 60

Thr Thr Ser Gly Phe Leu Gly Pro Leu Leu Val Leu Gln Ala Gly Phe  
65 70 75 80

Phe Leu Leu Thr Arg Ile Leu Thr Ile Pro Gln Ser Leu Asp Ser Trp  
85 90 95

Trp Thr Ser Leu Asn Phe Leu Gly Gly Ala Pro Thr Cys Pro Gly Gln  
100 105 110

Asn Ser Gln Ser Pro Thr Ser Asn His Ser Pro Thr Ser Cys Pro Pro  
115 120 125

Ile Cys Pro Gly Tyr Arg Trp Met Cys Leu Arg Arg Phe Ile Ile Phe  
130 135 140

Leu Phe Ile Leu Leu Leu Cys Leu Ile Phe Leu Leu Val Leu Leu Asp  
145 150 155 160

Tyr Gln Gly Met Leu Pro Val Cys Pro Leu Leu Pro Gly Thr Ser Thr  
165 170 175

Thr Ser Thr Gly Pro Cys Lys Thr Cys Thr Ile Pro Ala Arg Gly Thr  
180 185 190

Ser Met Phe Pro Ser Cys Cys Cys Thr Lys Pro Ser Asp Gly Asn Cys  
195 200 205

Thr Cys Ile Pro Ile Pro Ser Ser Trp Ala Phe Ala Arg Phe Leu Trp  
210 215 220

Glu Trp Ala Ser Val Arg Phe Ser Trp Leu Ser Leu Leu Val Pro Phe  
225 230 235 240

# Sequence Listing.txt

Val Gln Trp Phe Val Gly Leu Ser Pro Thr Val Trp Leu Ser Val Ile  
245 250 255  
Trp Met Met Trp Tyr Trp Gly Pro Ser Leu Tyr Asn Ile Leu Ser Pro  
260 265 270  
Phe Leu Pro Leu Leu Pro Ile Phe Phe Cys Leu Trp Val Tyr Ile  
275 280 285

<210> 146  
<211> 861  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Artificially  
synthesized sequence

<400> 146  
atgggagggtt ggtcttccaa acctcggaaa ggcattgggga cgaatctttc tgttcccaat 60  
cctctgggat tctttcccga tcaccagttg gaccctgcgt tcggagccaa ctcaaacaat 120  
ccagattggg gcggccgctg gagccaccg cagttcgaaa aagcggccgc ccctgcaccg 180  
aacatggaga acacaacatc aggattccta ggacccctgc tcgtgttaca ggcgggggtt 240  
ttcttgttga caagaatcct cacaatacca cagagtctag actcgtggtg gacttctctc 300  
aattttctag ggggagcacc cacgtgtcct ggccaaaatt cgcagtcccc aacctccaat 360  
cactcaccaa cctcttgtcc tccaatttgt cctggctatc gctggatgtg tctgcggcgt 420  
tttatcatat tcctcttcat cctgctgcta tgcctcatct tcttgttggt tcttctggac 480  
taccaaggta tgttgcccgt ttgtcctcta cttccaggaa catcaaccac cagcacgggg 540  
ccatgcaaga cctgcacgat tcctgctcaa ggaacctcta tgtttccctc ttgttgctgt 600  
acaaaacctt cggacagaaa ctgcacttgt attcccatcc catcatcctg ggctttcgca 660  
agattcctat gggagtgggc ctcagtccgt ttctcctggc tcagtttact agtgccattt 720  
gttcagtggg tcgtagggct ttccccact gtttggtttt cagttatatg gatgatgtgg 780  
tattgggggc caagtctgta caacatcttg agtccctttt tacctctatt accaattttc 840  
ttttgtcttt gggatatacat t 861

<210> 147  
<211> 287  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Artificially  
synthesized sequence

<400> 147  
Met Gly Gly Trp Ser Ser Lys Pro Arg Lys Gly Met Gly Thr Asn Leu  
1 5 10 15  
Ser Val Pro Asn Pro Leu Gly Phe Phe Pro Asp His Gln Leu Asp Pro  
20 25 30  
Ala Phe Gly Ala Asn Ser Asn Asn Pro Asp Trp Gly Gly Arg Trp Ser  
35 40 45  
His Pro Gln Phe Glu Lys Ala Ala Ala Pro Ala Pro Asn Met Glu Asn  
50 55 60  
Thr Thr Ser Gly Phe Leu Gly Pro Leu Leu Val Leu Gln Ala Gly Phe  
65 70 75 80  
Phe Leu Leu Thr Arg Ile Leu Thr Ile Pro Gln Ser Leu Asp Ser Trp



## Sequence Listing.txt

85

90

95

Trp Thr Ser Leu Asn Phe Leu Gly Gly Ala Pro Thr Cys Pro Gly Gln  
 100 105 110  
 Asn Ser Gln Ser Pro Thr Ser Asn His Ser Pro Thr Ser Cys Pro Pro  
 115 120 125  
 Ile Cys Pro Gly Tyr Arg Trp Met Cys Leu Arg Arg Phe Ile Ile Phe  
 130 135 140  
 Leu Phe Ile Leu Leu Leu Cys Leu Ile Phe Leu Leu Val Leu Leu Asp  
 145 150 155 160  
 Tyr Gln Gly Met Leu Pro Val Cys Pro Leu Leu Pro Gly Thr Ser Thr  
 165 170 175  
 Thr Ser Thr Gly Pro Cys Lys Thr Cys Thr Ile Pro Ala Gln Gly Thr  
 180 185 190  
 Ser Met Phe Pro Ser Cys Cys Cys Thr Lys Pro Ser Asp Arg Asn Cys  
 195 200 205  
 Thr Cys Ile Pro Ile Pro Ser Ser Trp Ala Phe Ala Arg Phe Leu Trp  
 210 215 220  
 Glu Trp Ala Ser Val Arg Phe Ser Trp Leu Ser Leu Leu Val Pro Phe  
 225 230 235 240  
 Val Gln Trp Phe Val Gly Leu Ser Pro Thr Val Trp Leu Ser Val Ile  
 245 250 255  
 Trp Met Met Trp Tyr Trp Gly Pro Ser Leu Tyr Asn Ile Leu Ser Pro  
 260 265 270  
 Phe Leu Pro Leu Leu Pro Ile Phe Phe Cys Leu Trp Val Tyr Ile  
 275 280 285

&lt;210&gt; 148

&lt;211&gt; 861

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence:Artificially synthesized sequence

&lt;400&gt; 148

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atgggagggt ggtcttccaa acctcggaaa ggcattggga cgaatctttc tgttcccaat 60
cctctgggat tctttcccga tcaccagttg gaccctgcgt tcggagccaa ctcaaacaat 120
ccagattggg gcggccgctg gagccaccgc cagttcgaaa aagcggccgc ccctgcaccg 180
aacatggaga acacaacatc aggattccta ggacccctgc tcgtgttaca ggcgggggtt 240
ttcttggtga caagaatcct cacaatacca cagagtctag actcgtggtg gacttctctc 300
aattttctag ggggagcacc cacgtgtcct ggccaaaatt cgcagtcccc aacctccaat 360
cactaccaa cctcttgctc tccaatttgt cctggctatc gctggatgtg tctgcggcgt 420
tttatcatat tcctcttcat cctgctgcta tgcctcatct tcttgttggt tcttctggac 480
taccaaggta tgttgcccgt ttgtcctcta cttccaggaa catcaaccac cagcacgggg 540
ccatgcaaga cctgcacgat tcctgctcga ggaacctcta tgtttccctc ttggtgctgt 600
acaaaacctt cggacagaaa ctgcacttgt attcccatcc catcatcctg ggcttttcga 660
agattcctat gggagtgggc ctcagtcctg ttctcctggc tcagtttact agtgccattt 720
gttcagtggt tcgtagggct ttccccactt gtttggtttt cagtttatat gatgatgtgg 780
tattgggggc caagtctgta caacatcttg agtccctttt tacctctatt accaattttc 840

```

ttttgtcttt gggtatacat t

<210> 149

<211> 287

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially  
synthesized sequence

<400> 149

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Met Gly Gly Trp Ser Ser Lys Pro Arg Lys Gly Met Gly Thr Asn Leu
 1          5          10          15
Ser Val Pro Asn Pro Leu Gly Phe Phe Pro Asp His Gln Leu Asp Pro
          20          25          30
Ala Phe Gly Ala Asn Ser Asn Asn Pro Asp Trp Gly Gly Arg Trp Ser
          35          40          45
His Pro Gln Phe Glu Lys Ala Ala Ala Pro Ala Pro Asn Met Glu Asn
 50          55          60
Thr Thr Ser Gly Phe Leu Gly Pro Leu Leu Val Leu Gln Ala Gly Phe
 65          70          75          80
Phe Leu Leu Thr Arg Ile Leu Thr Ile Pro Gln Ser Leu Asp Ser Trp
          85          90          95
Trp Thr Ser Leu Asn Phe Leu Gly Gly Ala Pro Thr Cys Pro Gly Gln
          100          105          110
Asn Ser Gln Ser Pro Thr Ser Asn His Ser Pro Thr Ser Cys Pro Pro
          115          120          125
Ile Cys Pro Gly Tyr Arg Trp Met Cys Leu Arg Arg Phe Ile Ile Phe
          130          135          140
Leu Phe Ile Leu Leu Leu Cys Leu Ile Phe Leu Leu Val Leu Leu Asp
          145          150          155          160
Tyr Gln Gly Met Leu Pro Val Cys Pro Leu Leu Pro Gly Thr Ser Thr
          165          170          175
Thr Ser Thr Gly Pro Cys Lys Thr Cys Thr Ile Pro Ala Arg Gly Thr
          180          185          190
Ser Met Phe Pro Ser Cys Cys Cys Thr Lys Pro Ser Asp Arg Asn Cys
          195          200          205
Thr Cys Ile Pro Ile Pro Ser Ser Trp Ala Phe Ala Arg Phe Leu Trp
          210          215          220
Glu Trp Ala Ser Val Arg Phe Ser Trp Leu Ser Leu Leu Val Pro Phe
          225          230          235          240
Val Gln Trp Phe Val Gly Leu Ser Pro Thr Val Trp Leu Ser Val Ile
          245          250          255
Trp Met Met Trp Tyr Trp Gly Pro Ser Leu Tyr Asn Ile Leu Ser Pro
          260          265          270

```

# Sequence Listing.txt

Phe Leu Pro Leu Leu Pro Ile Phe Phe Cys Leu Trp Val Tyr Ile  
275 280 285

<210> 150  
<211> 1254  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Artificially  
synthesized sequence

<400> 150  
atgggagggtt ggtcttccaa acctcggaaa ggcattgggga cgaatctttc tgttcccaat 60  
cctctgggat tctttcccga tcaccagttg gaccctgcgt tcggagccaa ctcaaacaat 120  
ccagattggg acttcaaccc caacaaggat caatggccag aggcaaatca ggtaggagcg 180  
ggcggccgcg cgcaacacga tgaagccgta gacaacaaat tcaacaaaga acaacaaaac 240  
gcgttctatg agatctttaca tttacctaac ttaaaccgaag aacaacgaaa cgccttcattc 300  
caaagttaa aagatgaccc aagccaaagc gctaaccctt tagcagaagc taaaaagcta 360  
aatgatgctc aggcgcgcaa agtagacaac aaattcaaca aagaacaaca aaacgcgttc 420  
tatgagatct tacattttacc taacttaaac gaagaacaac gaaacgcctt catccaaagt 480  
ttaaagatg acccaagcca aagcgctaac ctttttagcag aagctaaaaa gctaaatgat 540  
gctcaggcgc cgaaagcggc cgcccctgca ccgaacatgg agaacacaac atcaggattc 600  
ctaggacccc tgctcgtgtt acaggcgggg tttttcttgt tgacaagaat cctcacaata 660  
ccacagagtc tagactcgtg gtggacttct ctcaattttc tagggggagc acccacgtgt 720  
cctggccaaa attcgcagtc cccaacctcc aatcactcac caacctcttg tcttccaatt 780  
tgtcctggct atcgtctggat gtgtctgcgg cgttttatca tattcctctt catcctgctg 840  
ctatgcctca tcttctgtgt ggttcttctg gactaccaag gtatgttgcc cgtttgcctt 900  
ctacttccag gaacatcaac caccagcacg gggccatgca agacctgcac gattcctgct 960  
caaggaacct ctatgtttcc ctcttggtgc tgtacaaaac cttcggacgg aaactgcact 1020  
tgtattccca tcccatcatc ctgggctttc gcaagattcc tatgggagtg ggcctcagtc 1080  
cgtttctcct ggctcagttt actagtgcc tttgttcagt ggttcgtagg gctttccccc 1140  
actgtttggc tttcagttat atggatgatg tggattggg ggccaagtct gtacaacatc 1200  
ttgagtcctt ttttacctt attaccaatt ttcttttgc tttgggtata catt 1254

<210> 151  
<211> 418  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Artificially  
synthesized sequence

<400> 151  
Met Gly Gly Trp Ser Ser Lys Pro Arg Lys Gly Met Gly Thr Asn Leu  
1 5 10 15  
Ser Val Pro Asn Pro Leu Gly Phe Phe Pro Asp His Gln Leu Asp Pro  
20 25 30  
Ala Phe Gly Ala Asn Ser Asn Asn Pro Asp Trp Asp Phe Asn Pro Asn  
35 40 45  
Lys Asp Gln Trp Pro Glu Ala Asn Gln Val Gly Ala Gly Gly Arg Ala  
50 55 60  
Gln His Asp Glu Ala Val Asp Asn Lys Phe Asn Lys Glu Gln Gln Asn  
65 70 75 80

## Sequence Listing.txt

Ala Phe Tyr Glu Ile Leu His Leu Pro Asn Leu Asn Glu Glu Gln Arg  
85 90 95

Asn Ala Phe Ile Gln Ser Leu Lys Asp Asp Pro Ser Gln Ser Ala Asn  
100 105 110

Leu Leu Ala Glu Ala Lys Lys Leu Asn Asp Ala Gln Ala Pro Lys Val  
115 120 125

Asp Asn Lys Phe Asn Lys Glu Gln Gln Asn Ala Phe Tyr Glu Ile Leu  
130 135 140

His Leu Pro Asn Leu Asn Glu Glu Gln Arg Asn Ala Phe Ile Gln Ser  
145 150 155 160

Leu Lys Asp Asp Pro Ser Gln Ser Ala Asn Leu Leu Ala Glu Ala Lys  
165 170 175

Lys Leu Asn Asp Ala Gln Ala Pro Lys Ala Ala Ala Pro Ala Pro Asn  
180 185 190

Met Glu Asn Thr Thr Ser Gly Phe Leu Gly Pro Leu Leu Val Leu Gln  
195 200 205

Ala Gly Phe Phe Leu Leu Thr Arg Ile Leu Thr Ile Pro Gln Ser Leu  
210 215 220

Asp Ser Trp Trp Thr Ser Leu Asn Phe Leu Gly Gly Ala Pro Thr Cys  
225 230 235 240

Pro Gly Gln Asn Ser Gln Ser Pro Thr Ser Asn His Ser Pro Thr Ser  
245 250 255

Cys Pro Pro Ile Cys Pro Gly Tyr Arg Trp Met Cys Leu Arg Arg Phe  
260 265 270

Ile Ile Phe Leu Phe Ile Leu Leu Leu Cys Leu Ile Phe Leu Leu Val  
275 280 285

Leu Leu Asp Tyr Gln Gly Met Leu Pro Val Cys Pro Leu Leu Pro Gly  
290 295 300

Thr Ser Thr Thr Ser Thr Gly Pro Cys Lys Thr Cys Thr Ile Pro Ala  
305 310 315 320

Gln Gly Thr Ser Met Phe Pro Ser Cys Cys Cys Thr Lys Pro Ser Asp  
325 330 335

Gly Asn Cys Thr Cys Ile Pro Ile Pro Ser Ser Trp Ala Phe Ala Arg  
340 345 350

Phe Leu Trp Glu Trp Ala Ser Val Arg Phe Ser Trp Leu Ser Leu Leu  
355 360 365

Val Pro Phe Val Gln Trp Phe Val Gly Leu Ser Pro Thr Val Trp Leu  
370 375 380

Ser Val Ile Trp Met Met Trp Tyr Trp Gly Pro Ser Leu Tyr Asn Ile  
385 390 395 400

Leu Ser Pro Phe Leu Pro Leu Leu Pro Ile Phe Phe Cys Leu Trp Val  
405 410 415

# Sequence Listing.txt

Tyr Ile

<210> 152

<211> 1254

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 152

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atgggagggtt ggtcttccaa acctcggaaa ggcatgggga cgaatctttc tgttcccaat 60
cctctgggat tctttcccga tcaccagttg gaccctgctg tcggagccaa ctcaaacaat 120
ccagattggg acttcaaccc caacaaggat caatggccag aggcaaatca ggtaggagcg 180
ggcggccgcg cgcaacacga tgaagccgta gacaacaaat tcaacaaaga acaacaaaac 240
gcgttctatg agatctttaca ttacctaac ttaaacgaag aacaacgaaa cgccttcac 300
caaagttaa aagatgaccc aagccaaagc gctaaccctt tagcagaagc taaaaagcta 360
aatgatgctc aggcgccgaa agtagacaac aaattcaaca aagaacaaca aaacgcgttc 420
tatgagatct tacatttacc taacttaaag gaagaacaac gaaacgcctt catccaaagt 480
ttaaagatg acccaagcca aagcgctaac ctttagcag aagctaaaaa gctaaatgat 540
gctcaggcgc cgaaagcggc cgcccctgca ccgaacatgg agaacacaac atcaggattc 600
ctaggacccc tgctcgtgtt acaggcgggg ttttcttgt tgacaagaat cctcacaata 660
ccacagagtc tagactcgtg gtggacttct ctcaattttc tagggggagc acccacgtgt 720
cctggccaaa attcgcagtc cccaacctcc aatcactcac caacctctg tcctccaatt 780
tgtcctggct atcgtcggat gtgtctgcgg cgttttatca tattcctctt catcctgctg 840
ctatgcctca tcttcttgtt ggttcttctg gactaccaag gtatgttgcc cgtttgcct 900
ctacttccag gaacatcaac caccagcacg gggccatgca agacctgcac gattcctgct 960
cgaggaacct ctatgtttcc ctctgttgc tgtacaaaac cttcggacgg aaactgcact 1020
tgtattccca tcccacatc ctgggctttc gcaagattcc tatgggagtg ggcctcagtc 1080
cgtttctcct ggctcagttt actagtgcga tttgttcagt ggttcgtagg gctttcccc 1140
actgtttggc ttacagttat atggatgatg tggattggg ggccaagtct gtacaacatc 1200
ttgagtcctt tttacctct attaccaatt ttcttttgc tttgggtata catt 1254
```

<210> 153

<211> 418

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 153

```
Met Gly Gly Trp Ser Ser Lys Pro Arg Lys Gly Met Gly Thr Asn Leu
 1          5          10          15
Ser Val Pro Asn Pro Leu Gly Phe Phe Pro Asp His Gln Leu Asp Pro
          20          25          30
Ala Phe Gly Ala Asn Ser Asn Asn Pro Asp Trp Asp Phe Asn Pro Asn
          35          40          45
Lys Asp Gln Trp Pro Glu Ala Asn Gln Val Gly Ala Gly Gly Arg Ala
          50          55          60
Gln His Asp Glu Ala Val Asp Asn Lys Phe Asn Lys Glu Gln Gln Asn
          65          70          75          80
Ala Phe Tyr Glu Ile Leu His Leu Pro Asn Leu Asn Glu Glu Gln Arg
```

## 95

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# Sequence Listing.txt

<210> 154  
<211> 1254  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 154  
atgggagggtt ggtcttccaa acctcggaaa ggcatgggga cgaatctttc tgttcccaat 60  
cctctgggat tctttcccga tcaccagttg gaccctgctg tcggagccaa ctcaaacaat 120  
ccagattggg acttcaaccc caacaaggat caatggccag aggcaaatca ggtaggagcg 180  
ggcgggccgc cgcaacacga tgaagccgta gacaacaaat tcaacaaaga acaacaaaac 240  
gcgttctatg agatcttaca ttacctaac ttaaacgaag aacaacgaaa cgccttcac 300  
caaagttaa aagatgaccc aagccaaagc gctaaccctt tagcagaagc taaaaagcta 360  
aatgatgctc aggcgcccga agtagacaac aaattcaaca aagaacaaca aaacgcgttc 420  
tatgagatct tacatttacc taacttaaac gaagaacaac gaaacgcctt catccaaagt 480  
ttaaagatg acccaagcca aagcgctaac cttttagcag aagctaaaaa gctaaatgat 540  
gctcaggcgc cgaaaagcggc cgcccctgca ccgaacatgg agaacacaac atcaggattc 600  
ctaggacccc tgctcgtgtt acaggcgggg tttttcttgt tgacaagaat cctcacaata 660  
ccacagagtc tagactcgtg gtggacttct ctcaattttc tagggggagc acccacgtgt 720  
cctggccaaa attcgagtc cccaacctcc aatcactcac caacctctg tcctccaatt 780  
tgtcctggct atcgtctggat gtgtctgcgg cgttttatca tattcctctt catcctgctg 840  
ctatgcctca tcttcttgtt ggttcttctg gactaccaag gtatgttgcc cgtttgtcct 900  
ctacttccag gaacatcaac caccagcacg gggccatgca agacctgcac gattcctgct 960  
caaggaacct ctatgtttcc ctcttgttgc tgtacaaaac cttcggacag aaactgcact 1020  
tgtattccca tcccatcatc ctgggctttc gcaagattcc tatgggagtg ggcctcagtc 1080  
cgtttctcct ggctcagttt actagtgcc tttgttcagt ggttcgtagg gctttccccc 1140  
actgtttggc ttccagttat atggatgatg tggattggg ggccaagtct gtacaacatc 1200  
ttgagtcctt ttttacctct attaccaatt ttctttgtc tttgggtata catt 1254

<210> 155  
<211> 418  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 155  
Met Gly Gly Trp Ser Ser Lys Pro Arg Lys Gly Met Gly Thr Asn Leu  
1 5 10 15  
Ser Val Pro Asn Pro Leu Gly Phe Phe Pro Asp His Gln Leu Asp Pro  
20 25 30  
Ala Phe Gly Ala Asn Ser Asn Asn Pro Asp Trp Asp Phe Asn Pro Asn  
35 40 45  
Lys Asp Gln Trp Pro Glu Ala Asn Gln Val Gly Ala Gly Gly Arg Ala  
50 55 60  
Gln His Asp Glu Ala Val Asp Asn Lys Phe Asn Lys Glu Gln Gln Asn  
65 70 75 80  
Ala Phe Tyr Glu Ile Leu His Leu Pro Asn Leu Asn Glu Glu Gln Arg  
85 90 95

Sequence Listing.txt

Asn Ala Phe Ile Gln Ser Leu Lys Asp Asp Pro Ser Gln Ser Ala Asn  
 100 105 110  
 Leu Leu Ala Glu Ala Lys Lys Leu Asn Asp Ala Gln Ala Pro Lys Val  
 115 120 125  
 Asp Asn Lys Phe Asn Lys Glu Gln Gln Asn Ala Phe Tyr Glu Ile Leu  
 130 135 140  
 His Leu Pro Asn Leu Asn Glu Glu Gln Arg Asn Ala Phe Ile Gln Ser  
 145 150 155 160  
 Leu Lys Asp Asp Pro Ser Gln Ser Ala Asn Leu Leu Ala Glu Ala Lys  
 165 170 175  
 Lys Leu Asn Asp Ala Gln Ala Pro Lys Ala Ala Ala Pro Ala Pro Asn  
 180 185 190  
 Met Glu Asn Thr Thr Ser Gly Phe Leu Gly Pro Leu Leu Val Leu Gln  
 195 200 205  
 Ala Gly Phe Phe Leu Leu Thr Arg Ile Leu Thr Ile Pro Gln Ser Leu  
 210 215 220  
 Asp Ser Trp Trp Thr Ser Leu Asn Phe Leu Gly Gly Ala Pro Thr Cys  
 225 230 235 240  
 Pro Gly Gln Asn Ser Gln Ser Pro Thr Ser Asn His Ser Pro Thr Ser  
 245 250 255  
 Cys Pro Pro Ile Cys Pro Gly Tyr Arg Trp Met Cys Leu Arg Arg Phe  
 260 265 270  
 Ile Ile Phe Leu Phe Ile Leu Leu Leu Cys Leu Ile Phe Leu Leu Val  
 275 280 285  
 Leu Leu Asp Tyr Gln Gly Met Leu Pro Val Cys Pro Leu Leu Pro Gly  
 290 295 300  
 Thr Ser Thr Thr Ser Thr Gly Pro Cys Lys Thr Cys Thr Ile Pro Ala  
 305 310 315 320  
 Gln Gly Thr Ser Met Phe Pro Ser Cys Cys Cys Thr Lys Pro Ser Asp  
 325 330 335  
 Arg Asn Cys Thr Cys Ile Pro Ile Pro Ser Ser Trp Ala Phe Ala Arg  
 340 345 350  
 Phe Leu Trp Glu Trp Ala Ser Val Arg Phe Ser Trp Leu Ser Leu Leu  
 355 360 365  
 Val Pro Phe Val Gln Trp Phe Val Gly Leu Ser Pro Thr Val Trp Leu  
 370 375 380  
 Ser Val Ile Trp Met Met Trp Tyr Trp Gly Pro Ser Leu Tyr Asn Ile  
 385 390 395 400  
 Leu Ser Pro Phe Leu Pro Leu Leu Pro Ile Phe Phe Cys Leu Trp Val  
 405 410 415  
 Tyr Ile



# Sequence Listing.txt

<210> 156  
 <211> 1254  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 156  
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 cctctgggat tctttccga tcaccagttg gaccctgcgt tcggagccaa ctcaaacaat 120  
 ccagattggg acttcaaccc caacaaggat caatggccag aggcaaatca ggtaggagcg 180  
 ggcggccgcg cgcaacacga tgaagccgta gacaacaaat tcaacaaaga acaacaaaac 240  
 gcgttctatg agatcttaca tttacctaac ttaaaccgaag aacaacgaaa cgccttcac 300  
 caaagttaa aagatgaccc aagccaaagc gctaaccctt tagcagaagc taaaaagcta 360  
 aatgatgctc aggcgcgaa agtagacaac aaattcaaca aagaacaaca aaacgcgttc 420  
 tatgagatct tacatttacc taacttaaac gaagaacaac gaaacgcctt catccaaagt 480  
 ttaaaagatg acccaagcca aagcgctaac cttttagcag aagctaaaaa gctaaatgat 540  
 gctcaggcgc cgaaagcggc cgcccctgca ccgaacatgg agaacacaac atcaggattc 600  
 ctaggacccc tgctcgtgtt acaggcgggg ttttcttgt tgacaagaat cctcacaata 660  
 ccacagagtc tagactcgtg gtggacttct ctcaattttc tagggggagc acccacgtgt 720  
 cctggcctaa attcgagtc cccaacctcc aatcactcac caacctcttg tctccaatt 780  
 tgcctggct atcgctggat gtgtctgcgg cgttttatca tttcctctt catcctgctg 840  
 ctatgcctca tcttctgtt ggttcttctg gactaccaag gtatgttgcc cgtttgcct 900  
 ctacttccag gaacatcaac caccagcacg gggccatgca agacctgcac gattcctgct 960  
 cgaggaacct ctatgtttcc ctcttggtgc tgtacaaaac cttcggacag aaactgcact 1020  
 tgtattccca tcccatcatc ctgggctttc gcaagattcc tatgggagtg ggcctcagtc 1080  
 cgtttctcct ggctcagttt actagtgcc tttgttcagt gggtcgtagg gctttcccc 1140  
 actgtttggc tttcagttat atggatgatg tggattggg ggccaagtct gtacaacatc 1200  
 ttgagtcct ttttacctt attaccaatt ttctttgtc tttgggtata catt 1254

<210> 157  
 <211> 418  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 157  
 Met Gly Gly Trp Ser Ser Lys Pro Arg Lys Gly Met Gly Thr Asn Leu  
 1 5 10 15  
 Ser Val Pro Asn Pro Leu Gly Phe Phe Pro Asp His Gln Leu Asp Pro  
 20 25 30  
 Ala Phe Gly Ala Asn Ser Asn Asn Pro Asp Trp Asp Phe Asn Pro Asn  
 35 40 45  
 Lys Asp Gln Trp Pro Glu Ala Asn Gln Val Gly Ala Gly Gly Arg Ala  
 50 55 60  
 Gln His Asp Glu Ala Val Asp Asn Lys Phe Asn Lys Glu Gln Gln Asn  
 65 70 75 80  
 Ala Phe Tyr Glu Ile Leu His Leu Pro Asn Leu Asn Glu Glu Gln Arg  
 85 90 95

## Sequence Listing.txt

Asn Ala Phe Ile Gln Ser Leu Lys Asp Asp Pro Ser Gln Ser Ala Asn  
 100 105 110  
 Leu Leu Ala Glu Ala Lys Lys Leu Asn Asp Ala Gln Ala Pro Lys Val  
 115 120 125  
 Asp Asn Lys Phe Asn Lys Glu Gln Gln Asn Ala Phe Tyr Glu Ile Leu  
 130 135 140  
 His Leu Pro Asn Leu Asn Glu Glu Gln Arg Asn Ala Phe Ile Gln Ser  
 145 150 155 160  
 Leu Lys Asp Asp Pro Ser Gln Ser Ala Asn Leu Leu Ala Glu Ala Lys  
 165 170 175  
 Lys Leu Asn Asp Ala Gln Ala Pro Lys Ala Ala Ala Pro Ala Pro Asn  
 180 185 190  
 Met Glu Asn Thr Thr Ser Gly Phe Leu Gly Pro Leu Leu Val Leu Gln  
 195 200 205  
 Ala Gly Phe Phe Leu Leu Thr Arg Ile Leu Thr Ile Pro Gln Ser Leu  
 210 215 220  
 Asp Ser Trp Trp Thr Ser Leu Asn Phe Leu Gly Gly Ala Pro Thr Cys  
 225 230 235 240  
 Pro Gly Gln Asn Ser Gln Ser Pro Thr Ser Asn His Ser Pro Thr Ser  
 245 250 255  
 Cys Pro Pro Ile Cys Pro Gly Tyr Arg Trp Met Cys Leu Arg Arg Phe  
 260 265 270  
 Ile Ile Phe Leu Phe Ile Leu Leu Leu Cys Leu Ile Phe Leu Leu Val  
 275 280 285  
 Leu Leu Asp Tyr Gln Gly Met Leu Pro Val Cys Pro Leu Leu Pro Gly  
 290 295 300  
 Thr Ser Thr Thr Ser Thr Gly Pro Cys Lys Thr Cys Thr Ile Pro Ala  
 305 310 315 320  
 Arg Gly Thr Ser Met Phe Pro Ser Cys Cys Cys Thr Lys Pro Ser Asp  
 325 330 335  
 Arg Asn Cys Thr Cys Ile Pro Ile Pro Ser Ser Trp Ala Phe Ala Arg  
 340 345 350  
 Phe Leu Trp Glu Trp Ala Ser Val Arg Phe Ser Trp Leu Ser Leu Leu  
 355 360 365  
 Val Pro Phe Val Gln Trp Phe Val Gly Leu Ser Pro Thr Val Trp Leu  
 370 375 380  
 Ser Val Ile Trp Met Met Trp Tyr Trp Gly Pro Ser Leu Tyr Asn Ile  
 385 390 395 400  
 Leu Ser Pro Phe Leu Pro Leu Leu Pro Ile Phe Phe Cys Leu Trp Val  
 405 410 415  
 Tyr Ile

# Sequence Listing.txt

<210> 158  
<211> 1053  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 158  
atgggagggt ggtcttccaa acctcggaaa ggcattggga cgaatctttc tgttcccaat 60  
cctctgggat tctttcccga tcaccagttg gaccctgcgt tcggagccaa ctcaaacaat 120  
ccagattggg acttcaaccc caacaaggat caatggccag aggcaaatca ggtaggagcg 180  
ggcgcccgca tgaactctga ttccgaatgc ccgctgtctc atgacggtta ctgcctgcat 240  
gatggcgtat gcatgtacat cgaagctctg gacaaatacg catgcaactg tgttgtaggt 300  
tacatcggcg aacgttgcca gtatcgcgac ctgaaatggg gggaactgcg taaggcggcc 360  
gcccctgcac cgaacatgga gaacacaaca tcaggattcc taggaccctt gctcgtgtta 420  
caggcggggg ttttcttgtt gacaagaatc ctcacaatac cacagagtct agactcgtgg 480  
tggacttctc tcaattttct agggggagca cccacgtgtc ctggccaaaa ttcgcagtcc 540  
ccaacctcca atcactcacc aacctcttgt cctccaattt gtcctggcta tcgctggatg 600  
tgtctgcggc gttttatcat attcctcttc atcctgctgc tatgcctcat cttcttggttg 660  
gttcttctgg actaccaagg tatgttgccc gtttgccttc tacttccagg aacatcaacc 720  
accagcacgg ggccatgcaa gacctgcacg attcctgctc aaggaacctc tatgtttccc 780  
tcttgttgct gtacaaaacc ttcggacgga aactgcactt gtattcccat cccatcatcc 840  
tgggctttcg caagattcct atgggagtg gacctcagtc gtttctcctg gctcagttta 900  
ctagtgccat ttgttcagtg gttcgtaggg ctttcccca ctgtttggct ttcagttata 960  
tggatgatgt ggtattgggg gccaaagtct tacaacatct tgagtcctt tttacctcta 1020  
ttaccaattt tcttttgctt ttgggtatac att 1053

<210> 159  
<211> 351  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 159  
Met Gly Gly Trp Ser Ser Lys Pro Arg Lys Gly Met Gly Thr Asn Leu  
1 5 10 15  
Ser Val Pro Asn Pro Leu Gly Phe Phe Pro Asp His Gln Leu Asp Pro  
20 25 30  
Ala Phe Gly Ala Asn Ser Asn Asn Pro Asp Trp Asp Phe Asn Pro Asn  
35 40 45  
Lys Asp Gln Trp Pro Glu Ala Asn Gln Val Gly Ala Gly Gly Arg Met  
50 55 60  
Asn Ser Asp Ser Glu Cys Pro Leu Ser His Asp Gly Tyr Cys Leu His  
65 70 75 80  
Asp Gly Val Cys Met Tyr Ile Glu Ala Leu Asp Lys Tyr Ala Cys Asn  
85 90 95  
Cys Val Val Gly Tyr Ile Gly Glu Arg Cys Gln Tyr Arg Asp Leu Lys  
100 105 110  
Trp Trp Glu Leu Arg Lys Ala Ala Ala Pro Ala Pro Asn Met Glu Asn

## Sequence Listing.txt

115

120

125

Thr Thr Ser Gly Phe Leu Gly Pro Leu Leu Val Leu Gln Ala Gly Phe  
 130 135 140  
 Phe Leu Leu Thr Arg Ile Leu Thr Ile Pro Gln Ser Leu Asp Ser Trp  
 145 150 155 160  
 Trp Thr Ser Leu Asn Phe Leu Gly Gly Ala Pro Thr Cys Pro Gly Gln  
 165 170 175  
 Asn Ser Gln Ser Pro Thr Ser Asn His Ser Pro Thr Ser Cys Pro Pro  
 180 185 190  
 Ile Cys Pro Gly Tyr Arg Trp Met Cys Leu Arg Arg Phe Ile Ile Phe  
 195 200 205  
 Leu Phe Ile Leu Leu Leu Cys Leu Ile Phe Leu Leu Val Leu Leu Asp  
 210 215 220  
 Tyr Gln Gly Met Leu Pro Val Cys Pro Leu Leu Pro Gly Thr Ser Thr  
 225 230 235 240  
 Thr Ser Thr Gly Pro Cys Lys Thr Cys Thr Ile Pro Ala Gln Gly Thr  
 245 250 255  
 Ser Met Phe Pro Ser Cys Cys Cys Thr Lys Pro Ser Asp Gly Asn Cys  
 260 265 270  
 Thr Cys Ile Pro Ile Pro Ser Ser Trp Ala Phe Ala Arg Phe Leu Trp  
 275 280 285  
 Glu Trp Ala Ser Val Arg Phe Ser Trp Leu Ser Leu Leu Val Pro Phe  
 290 295 300  
 Val Gln Trp Phe Val Gly Leu Ser Pro Thr Val Trp Leu Ser Val Ile  
 305 310 315 320  
 Trp Met Met Trp Tyr Trp Gly Pro Ser Leu Tyr Asn Ile Leu Ser Pro  
 325 330 335  
 Phe Leu Pro Leu Leu Pro Ile Phe Phe Cys Leu Trp Val Tyr Ile  
 340 345 350

&lt;210&gt; 160

&lt;211&gt; 1053

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence:Artificially  
synthesized sequence

&lt;400&gt; 160

```

atgggagggtt ggtcttccaa acctcggaaa ggcattggga cgaatctttc tgttcccaat 60
cctctgggat tctttccga tcaccagt gaccctgcgt tcggagccaa ctcaaacaat 120
ccagattggg acttcaaccc caacaaggat caatggccag aggcaaatca ggtaggagcg 180
ggcggccgca tgaactctga ttccgaatgc ccgctgtctc atgacggtta ctgcctgcat 240
gatggcgtat gcatgtacat cgaagctctg gacaaatacg catgcaactg tgttgtaggt 300
tacatcggcg aacgttgcca gtatcgcgac ctgaaatggg gggaactgcg taaggcggcc 360
gccccctgcac cgaacatgga gaacacaaca tcaggattcc taggaccctt gctcgtggtt 420
caggcggggt ttttcttgtt gacaagaatc ctcacaatac cacagagtct agactcgtgg 480

```

# Sequence Listing.txt

```

tggactttctc tcaattttct aggggggagca cccacgtgtc ctggccaaaa ttcgcagtc 540
ccaacctcca atcactcacc aacctcttgt cctccaattt gtcctggcta tcgctggatg 600
tgtctgcggc gttttatcat attcctcttc atcctgtgc tatgcctcat cttcttggtg 660
gttcttcttg actaccaagg tatgttgccc gtttgcctc tacttccagg aacatcaacc 720
accagcacgg ggccatgcaa gacctgcacg attcctgctc gaggaacctc tatgtttccc 780
tcttggtgct gtacaaaacc ttcggacgga aactgcactt gtattcccat cccatcatcc 840
tgggctttcg caagatttct atgggagtg gcctcagtc gtttctcctg gctcagttta 900
ctagtggcat ttgttcagtg gttcgtaggg ctttccccca ctgtttggct ttcagttata 960
tggatgatgt ggtattgggg gccaaagtctg tacaacatct tgagtccctt tttacctcta 1020
ttaccaattt tcttttgct tgggtatac att 1053

```

<210> 161

<211> 351

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 161

```

Met Gly Gly Trp Ser Ser Lys Pro Arg Lys Gly Met Gly Thr Asn Leu
 1          5          10          15
Ser Val Pro Asn Pro Leu Gly Phe Phe Pro Asp His Gln Leu Asp Pro
          20          25          30
Ala Phe Gly Ala Asn Ser Asn Asn Pro Asp Trp Asp Phe Asn Pro Asn
          35          40          45
Lys Asp Gln Trp Pro Glu Ala Asn Gln Val Gly Ala Gly Gly Arg Met
          50          55          60
Asn Ser Asp Ser Glu Cys Pro Leu Ser His Asp Gly Tyr Cys Leu His
          65          70          75          80
Asp Gly Val Cys Met Tyr Ile Glu Ala Leu Asp Lys Tyr Ala Cys Asn
          85          90          95
Cys Val Val Gly Tyr Ile Gly Glu Arg Cys Gln Tyr Arg Asp Leu Lys
          100          105          110
Trp Trp Glu Leu Arg Lys Ala Ala Ala Pro Ala Pro Asn Met Glu Asn
          115          120          125
Thr Thr Ser Gly Phe Leu Gly Pro Leu Leu Val Leu Gln Ala Gly Phe
          130          135          140
Phe Leu Leu Thr Arg Ile Leu Thr Ile Pro Gln Ser Leu Asp Ser Trp
          145          150          155          160
Trp Thr Ser Leu Asn Phe Leu Gly Gly Ala Pro Thr Cys Pro Gly Gln
          165          170          175
Asn Ser Gln Ser Pro Thr Ser Asn His Ser Pro Thr Ser Cys Pro Pro
          180          185          190
Ile Cys Pro Gly Tyr Arg Trp Met Cys Leu Arg Arg Phe Ile Ile Phe
          195          200          205
Leu Phe Ile Leu Leu Leu Cys Leu Ile Phe Leu Leu Val Leu Leu Asp
          210          215          220

```

# Sequence Listing.txt

```

Tyr Gln Gly Met Leu Pro Val Cys Pro Leu Leu Pro Gly Thr Ser Thr
225                230                235                240

Thr Ser Thr Gly Pro Cys Lys Thr Cys Thr Ile Pro Ala Arg Gly Thr
                245                250                255

Ser Met Phe Pro Ser Cys Cys Cys Thr Lys Pro Ser Asp Gly Asn Cys
                260                265                270

Thr Cys Ile Pro Ile Pro Ser Ser Trp Ala Phe Ala Arg Phe Leu Trp
                275                280                285

Glu Trp Ala Ser Val Arg Phe Ser Trp Leu Ser Leu Leu Val Pro Phe
290                295                300

Val Gln Trp Phe Val Gly Leu Ser Pro Thr Val Trp Leu Ser Val Ile
305                310                315                320

Trp Met Met Trp Tyr Trp Gly Pro Ser Leu Tyr Asn Ile Leu Ser Pro
325                330                335

Phe Leu Pro Leu Leu Pro Ile Phe Phe Cys Leu Trp Val Tyr Ile
340                345                350

```

<210> 162  
 <211> 1053  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence:Artificially  
 synthesized sequence

```

<400> 162
atgggagggt ggtcttccaa acctcggaaa ggcattggga cgaatctttc tgttcccaat 60
cctctgggat tctttcccga tcaccagttg gaccctgcgt tcggagccaa ctcaaacaat 120
ccagattggg acttcaaccc caacaaggat caatggccag aggcaaatca ggtaggagcg 180
ggcggccgca tgaactctga ttccgaatgc ccgctgtctc atgacggtta ctgcctgcat 240
gatggcgat gcatgtacat cgaagctctg gacaaatacg catgcaactg tgttgtaggt 300
tacatcggcg aacgttgcca gtatcgcgac ctgaaatggg gggaactgcg taaggcggcc 360
gcccctgcac cgaacatgga gaacacaaca tcaggattcc taggaccctc gctcgtgta 420
caggcggggt ttttcttggt gacaagaatc ctcacaatac cacagagtct agactcgtgg 480
tggacttctc tcaattttct agggggagca cccacgtgtc ctggccaaaa ttcgcagtcc 540
ccaacctcca atcactcacc aacctcttgt cctccaattt gtcctggcta tcgctggatg 600
tgtctgcggc gttttatcat attcctcttc atcctgctgc tatgcctcat cttcttggtg 660
gttcttctgg actaccaagg tatgttgccc gtttgcctc tacttccagg aacatcaacc 720
accagcacgg ggccatgcaa gacctgcacg attcctgctc aaggaacctc tatgtttccc 780
tcttgttgct gtacaaaacc ttcggacaga aactgcactt gtattcccat cccatcatcc 840
tgggctttcg caagattcct atgggagtg gacctcagtc gtttctcctg gctcagttta 900
ctagtgccat ttgttcagtg gttcgtaggg ctttcccca ctgtttggct ttcagttata 960
tggatgatgt ggtattgggg gccaaagtctg tacaacatct tgagtccttt tttacctcta 1020
ttaccaattt tcttttgtct ttgggtatac att 1053

```

<210> 163  
 <211> 351  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence:Artificially  
 Page 118

## Sequence Listing.txt

## synthesized sequence

&lt;400&gt; 163

```

Met Gly Gly Trp Ser Ser Lys Pro Arg Lys Gly Met Gly Thr Asn Leu
 1          5          10          15
Ser Val Pro Asn Pro Leu Gly Phe Phe Pro Asp His Gln Leu Asp Pro
          20          25          30
Ala Phe Gly Ala Asn Ser Asn Asn Pro Asp Trp Asp Phe Asn Pro Asn
          35          40          45
Lys Asp Gln Trp Pro Glu Ala Asn Gln Val Gly Ala Gly Gly Arg Met
          50          55          60
Asn Ser Asp Ser Glu Cys Pro Leu Ser His Asp Gly Tyr Cys Leu His
          65          70          75          80
Asp Gly Val Cys Met Tyr Ile Glu Ala Leu Asp Lys Tyr Ala Cys Asn
          85          90          95
Cys Val Val Gly Tyr Ile Gly Glu Arg Cys Gln Tyr Arg Asp Leu Lys
          100          105          110
Trp Trp Glu Leu Arg Lys Ala Ala Ala Pro Ala Pro Asn Met Glu Asn
          115          120          125
Thr Thr Ser Gly Phe Leu Gly Pro Leu Leu Val Leu Gln Ala Gly Phe
          130          135          140
Phe Leu Leu Thr Arg Ile Leu Thr Ile Pro Gln Ser Leu Asp Ser Trp
          145          150          155          160
Trp Thr Ser Leu Asn Phe Leu Gly Gly Ala Pro Thr Cys Pro Gly Gln
          165          170          175
Asn Ser Gln Ser Pro Thr Ser Asn His Ser Pro Thr Ser Cys Pro Pro
          180          185          190
Ile Cys Pro Gly Tyr Arg Trp Met Cys Leu Arg Arg Phe Ile Ile Phe
          195          200          205
Leu Phe Ile Leu Leu Leu Cys Leu Ile Phe Leu Leu Val Leu Leu Asp
          210          215          220
Tyr Gln Gly Met Leu Pro Val Cys Pro Leu Leu Pro Gly Thr Ser Thr
          225          230          235          240
Thr Ser Thr Gly Pro Cys Lys Thr Cys Thr Ile Pro Ala Gln Gly Thr
          245          250          255
Ser Met Phe Pro Ser Cys Cys Cys Thr Lys Pro Ser Asp Arg Asn Cys
          260          265          270
Thr Cys Ile Pro Ile Pro Ser Ser Trp Ala Phe Ala Arg Phe Leu Trp
          275          280          285
Glu Trp Ala Ser Val Arg Phe Ser Trp Leu Ser Leu Leu Val Pro Phe
          290          295          300
Val Gln Trp Phe Val Gly Leu Ser Pro Thr Val Trp Leu Ser Val Ile
          305          310          315          320

```

# Sequence Listing.txt

Trp Met Met Trp Tyr Trp Gly Pro Ser Leu Tyr Asn Ile Leu Ser Pro  
325 330 335

Phe Leu Pro Leu Leu Pro Ile Phe Phe Cys Leu Trp Val Tyr Ile  
340 345 350

<210> 164  
<211> 1053  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 164  
atgggagggt ggtcttccaa acctcggaaa ggcattggga cgaatctttc tgttcccaat 60  
cctctgggat tctttccgga tcaccagttg gaccctgcgt tcggagccaa ctcaaacaat 120  
ccagattggg acttcaaccc caacaaggat caatggccag aggcaaatca ggtaggagcg 180  
ggcggccgca tgaactctga ttccgaatgc ccgctgtctc atgacggtta ctgcctgcat 240  
gatggcgtat gcatgtacat cgaagctctg gacaaatacg catgcaactg tgttgttagt 300  
tacatcggcg aacgttgcca gtatcgcgac ctgaaatggg gggaactgcg taaggcggcc 360  
gcccctgcac cgaacatgga gaacacaaca tcaggattcc taggaccctt gctcgtgtta 420  
caggcggggg ttttcttgtt gacaagaatc ctcacaatac cacagagtct agactcgtgg 480  
tggacttctc tcaattttct agggggagca cccacgtgtc ctggccaaaa ttcgcagtcc 540  
ccaacctcca atcactcacc aacctcttgt cctccaattt gtcctggcta tcgctggatg 600  
tgtctgcggc gttttatcat attcctcttc atcctgctgc tatgcctcat cttcttgttg 660  
gttcttctgg actaccaagg tatgttgccc gtttgcctc tacttccagg aacatcaacc 720  
accagcacgg ggccatgcaa gacctgcacg attcctgctc gaggaacctc tatgtttccc 780  
tcttggtgct gtacaaaacc ttcggacaga aactgcactt gtattcccat cccatcatcc 840  
tgggctttcg caagattcct atgggagtgg gcctcagtcg gtttctcctg gctcagttta 900  
ctagtgccat ttgttcagtg gttcgtaggg ctttccccca ctgtttggct ttcagttata 960  
tggatgatgt ggtattgggg gccaaagtctg tacaacatct tgagtcctct tttacctcta 1020  
ttaccaattt tcttttgtct ttgggtatac att 1053

<210> 165  
<211> 351  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 165  
Met Gly Gly Trp Ser Ser Lys Pro Arg Lys Gly Met Gly Thr Asn Leu  
1 5 10 15  
Ser Val Pro Asn Pro Leu Gly Phe Phe Pro Asp His Gln Leu Asp Pro  
20 25 30  
Ala Phe Gly Ala Asn Ser Asn Asn Pro Asp Trp Asp Phe Asn Pro Asn  
35 40 45  
Lys Asp Gln Trp Pro Glu Ala Asn Gln Val Gly Ala Gly Gly Arg Met  
50 55 60  
Asn Ser Asp Ser Glu Cys Pro Leu Ser His Asp Gly Tyr Cys Leu His  
65 70 75 80  
Asp Gly Val Cys Met Tyr Ile Glu Ala Leu Asp Lys Tyr Ala Cys Asn



## Sequence Listing.txt

85

90

95

Cys Val Val Gly Tyr Ile Gly Glu Arg Cys Gln Tyr Arg Asp Leu Lys  
 100 105 110  
 Trp Trp Glu Leu Arg Lys Ala Ala Ala Pro Ala Pro Asn Met Glu Asn  
 115 120 125  
 Thr Thr Ser Gly Phe Leu Gly Pro Leu Leu Val Leu Gln Ala Gly Phe  
 130 135 140  
 Phe Leu Leu Thr Arg Ile Leu Thr Ile Pro Gln Ser Leu Asp Ser Trp  
 145 150 155 160  
 Trp Thr Ser Leu Asn Phe Leu Gly Gly Ala Pro Thr Cys Pro Gly Gln  
 165 170 175  
 Asn Ser Gln Ser Pro Thr Ser Asn His Ser Pro Thr Ser Cys Pro Pro  
 180 185 190  
 Ile Cys Pro Gly Tyr Arg Trp Met Cys Leu Arg Arg Phe Ile Ile Phe  
 195 200 205  
 Leu Phe Ile Leu Leu Leu Cys Leu Ile Phe Leu Leu Val Leu Leu Asp  
 210 215 220  
 Tyr Gln Gly Met Leu Pro Val Cys Pro Leu Leu Pro Gly Thr Ser Thr  
 225 230 235 240  
 Thr Ser Thr Gly Pro Cys Lys Thr Cys Thr Ile Pro Ala Arg Gly Thr  
 245 250 255  
 Ser Met Phe Pro Ser Cys Cys Cys Thr Lys Pro Ser Asp Arg Asn Cys  
 260 265 270  
 Thr Cys Ile Pro Ile Pro Ser Ser Trp Ala Phe Ala Arg Phe Leu Trp  
 275 280 285  
 Glu Trp Ala Ser Val Arg Phe Ser Trp Leu Ser Leu Leu Val Pro Phe  
 290 295 300  
 Val Gln Trp Phe Val Gly Leu Ser Pro Thr Val Trp Leu Ser Val Ile  
 305 310 315 320  
 Trp Met Met Trp Tyr Trp Gly Pro Ser Leu Tyr Asn Ile Leu Ser Pro  
 325 330 335  
 Phe Leu Pro Leu Leu Pro Ile Phe Phe Cys Leu Trp Val Tyr Ile  
 340 345 350

&lt;210&gt; 166

&lt;211&gt; 912

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence:Artificially synthesized sequence

&lt;400&gt; 166

atgggagggtt ggtcttccaa acctcggaaa ggcattgggga cgaatctttc tgttcccaat 60  
 cctctgggat tctttccga tcaccagttg gacctgcgt tcggagccaa ctcaaacaat 120

# Sequence Listing.txt

```

ccagattggg acttcaaccc caacaaggat caatggccag aggcaaatca ggtaggagcg 180
ggcggccgct ggagccaccc gcagttcgaa aaagcggccg cccctgcacc gaacatggag 240
aacacaacat caggattcct aggacccctg ctctgtgttac aggcgggggt tttcttggtg 300
acaagaatcc tcacaatacc acagagtcta gactcgtggt ggacttctct caattttcta 360
gggggagcac ccacgtgtcc tggccaaaat tcgcagtccc caacctcaa tcactcacca 420
acctcttgtc ctccaatttg tcctggctat cgctggatgt gtctgcggcg ttttatcata 480
ttcctcttca tcctgctgct atgcctcatc ttcttggttg ttcttctgga ctaccaaggt 540
atgttgcccg tttgtcctct acttccagga acatcaacca ccagcacggg gccatgcaag 600
acctgcacga ttctgtctca aggaacctct atgtttccct ctgttgctg tacaaaacct 660
tcggacggaa actgcacttg tattcccatc ccatcatcct gggctttcgc aagattccta 720
tgggagtggg cctcagtcctg tttctcctgg ctacagtttac tagtgccatt tgttcagtgg 780
ttcgtagggc tttcccccac tgtttggtt tcagttatat ggatgatgtg gtattggggg 840
ccaagtctgt acaacatctt gagtcccttt ttacctctat taccaatttt cttttgtctt 900
tgggtataca tt                                     912

```

<210> 167

<211> 304

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 167

```

Met Gly Gly Trp Ser Ser Lys Pro Arg Lys Gly Met Gly Thr Asn Leu
 1          5          10          15
Ser Val Pro Asn Pro Leu Gly Phe Phe Pro Asp His Gln Leu Asp Pro
          20          25          30
Ala Phe Gly Ala Asn Ser Asn Asn Pro Asp Trp Asp Phe Asn Pro Asn
          35          40          45
Lys Asp Gln Trp Pro Glu Ala Asn Gln Val Gly Ala Gly Gly Arg Trp
          50          55          60
Ser His Pro Gln Phe Glu Lys Ala Ala Ala Pro Ala Pro Asn Met Glu
          65          70          75          80
Asn Thr Thr Ser Gly Phe Leu Gly Pro Leu Leu Val Leu Gln Ala Gly
          85          90          95
Phe Phe Leu Leu Thr Arg Ile Leu Thr Ile Pro Gln Ser Leu Asp Ser
          100          105          110
Trp Trp Thr Ser Leu Asn Phe Leu Gly Gly Ala Pro Thr Cys Pro Gly
          115          120          125
Gln Asn Ser Gln Ser Pro Thr Ser Asn His Ser Pro Thr Ser Cys Pro
          130          135          140
Pro Ile Cys Pro Gly Tyr Arg Trp Met Cys Leu Arg Arg Phe Ile Ile
          145          150          155          160
Phe Leu Phe Ile Leu Leu Leu Cys Leu Ile Phe Leu Leu Val Leu Leu
          165          170          175
Asp Tyr Gln Gly Met Leu Pro Val Cys Pro Leu Leu Pro Gly Thr Ser
          180          185          190
Thr Thr Ser Thr Gly Pro Cys Lys Thr Cys Thr Ile Pro Ala Gln Gly

```

Sequence Listing.txt

195

200

205

Thr Ser Met Phe Pro Ser Cys Cys Cys Thr Lys Pro Ser Asp Gly Asn  
 210 215 220  
 Cys Thr Cys Ile Pro Ile Pro Ser Ser Trp Ala Phe Ala Arg Phe Leu  
 225 230 235 240  
 Trp Glu Trp Ala Ser Val Arg Phe Ser Trp Leu Ser Leu Leu Val Pro  
 245 250 255  
 Phe Val Gln Trp Phe Val Gly Leu Ser Pro Thr Val Trp Leu Ser Val  
 260 265 270  
 Ile Trp Met Met Trp Tyr Trp Gly Pro Ser Leu Tyr Asn Ile Leu Ser  
 275 280 285  
 Pro Phe Leu Pro Leu Leu Pro Ile Phe Phe Cys Leu Trp Val Tyr Ile  
 290 295 300

<210> 168

<211> 912

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially  
 synthesized sequence

<400> 168

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| atgggagggt | ggtcttccaa | acctcggaaa | ggcatgggga | cgaatctttc | tgttcccaat | 60  |
| cctctgggat | tctttcccga | tcaccagttg | gaccctgcgt | tcggagccaa | ctcaaacaat | 120 |
| ccagattggg | acttcaaccc | caacaaggat | caatggccag | aggcaaatca | ggtaggagcg | 180 |
| ggcggccgct | ggagccaccc | gcagttcgaa | aaagcggccg | cccctgcacc | gaacatggag | 240 |
| aacacaacat | caggattcct | aggacccctg | ctcgtgttac | aggcgggggt | tttcttggtg | 300 |
| acaagaatcc | tcacaatacc | acagagtcta | gactcgtggg | ggacttctct | caattttcta | 360 |
| gggggagcac | ccacgtgtcc | tggccaaaat | tcgcagtccc | caacctccaa | tcactcacca | 420 |
| acctctgtc  | ctccaatttg | tcctggctat | cgctggatgt | gtctgcggcg | ttttatcata | 480 |
| ttcctcttca | tcctgctgct | atgcctcatc | ttcttggttg | ttcttctgga | ctaccaaggt | 540 |
| atgttgcccg | tttgctctct | acttccagga | acatcaacca | ccagcacggg | gccatgcaag | 600 |
| acctgcacga | ttcctgctcg | aggaacctct | atgtttccct | cttgttgctg | tacaaaacct | 660 |
| tcggacggaa | actgcacttg | tattcccata | ccatcatcct | gggctttcgc | aagattccta | 720 |
| tgggagtggg | cctcagtcgg | tttctcctgg | ctcagtttac | tagtgccatt | tgttcagtgg | 780 |
| ttcgtagggc | tttcccccac | tgtttggtct | tcagttatat | ggatgatgtg | gtattggggg | 840 |
| ccaagtctgt | acaacatctt | gagtcccttt | ttacctctat | taccaatttt | cttttgcctt | 900 |
| tggtatata  | tt         |            |            |            |            | 912 |

<210> 169

<211> 304

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially  
 synthesized sequence

<400> 169

Met Gly Gly Trp Ser Ser Lys Pro Arg Lys Gly Met Gly Thr Asn Leu  
 1 5 10 15

Ser Val Pro Asn Pro Leu Gly Phe Phe Pro Asp His Gln Leu Asp Pro  
 Page 123

## Sequence Listing.txt

20

25

30

Ala Phe Gly Ala Asn Ser Asn Asn Pro Asp Trp Asp Phe Asn Pro Asn  
           35                          40                          45  
 Lys Asp Gln Trp Pro Glu Ala Asn Gln Val Gly Ala Gly Gly Arg Trp  
       50                          55                          60  
 Ser His Pro Gln Phe Glu Lys Ala Ala Ala Pro Ala Pro Asn Met Glu  
   65                          70                          75                          80  
 Asn Thr Thr Ser Gly Phe Leu Gly Pro Leu Leu Val Leu Gln Ala Gly  
           85                          90                          95  
 Phe Phe Leu Leu Thr Arg Ile Leu Thr Ile Pro Gln Ser Leu Asp Ser  
          100                         105                         110  
 Trp Trp Thr Ser Leu Asn Phe Leu Gly Gly Ala Pro Thr Cys Pro Gly  
      115                         120                         125  
 Gln Asn Ser Gln Ser Pro Thr Ser Asn His Ser Pro Thr Ser Cys Pro  
   130                         135                         140  
 Pro Ile Cys Pro Gly Tyr Arg Trp Met Cys Leu Arg Arg Phe Ile Ile  
  145                         150                         155                         160  
 Phe Leu Phe Ile Leu Leu Leu Cys Leu Ile Phe Leu Leu Val Leu Leu  
          165                         170                         175  
 Asp Tyr Gln Gly Met Leu Pro Val Cys Pro Leu Leu Pro Gly Thr Ser  
          180                         185                         190  
 Thr Thr Ser Thr Gly Pro Cys Lys Thr Cys Thr Ile Pro Ala Arg Gly  
      195                         200                         205  
 Thr Ser Met Phe Pro Ser Cys Cys Cys Thr Lys Pro Ser Asp Gly Asn  
   210                         215                         220  
 Cys Thr Cys Ile Pro Ile Pro Ser Ser Trp Ala Phe Ala Arg Phe Leu  
  225                         230                         235                         240  
 Trp Glu Trp Ala Ser Val Arg Phe Ser Trp Leu Ser Leu Leu Val Pro  
          245                         250                         255  
 Phe Val Gln Trp Phe Val Gly Leu Ser Pro Thr Val Trp Leu Ser Val  
          260                         265                         270  
 Ile Trp Met Met Trp Tyr Trp Gly Pro Ser Leu Tyr Asn Ile Leu Ser  
      275                         280                         285  
 Pro Phe Leu Pro Leu Leu Pro Ile Phe Phe Cys Leu Trp Val Tyr Ile  
   290                         295                         300

&lt;210&gt; 170

&lt;211&gt; 912

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

 <223> Description of Artificial Sequence:Artificially  
 synthesized sequence

# Sequence Listing.txt

<400> 170

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atgggagggt ggtcttccaa acctcggaaa ggcattggga cgaatctttc tgttcccaat 60
cctctgggat tctttcccga tcaccagttg gaccctgcgt tcggagccaa ctcaaacaat 120
ccagattggg acttcaaccc caacaaggat caatggccag aggcaaatca ggtaggagcg 180
ggcggccgct ggagccaccc gcagttcgaa aaagcggccg cccctgcacc gaacatggag 240
aacacaacat caggattcct aggacccctg ctcgtgttac aggcgggggt tttcttggtg 300
acaagaatcc tcacaatacc acagagtcta gactcgtggt ggacttctct caattttcta 360
gggggagcac ccacgtgtcc tggccaaaat tcgcagtccc caacctccaa tcactcacca 420
acctcttgtc ctccaatttg tcctggctat cgctggatgt gtctgcggcg ttttatcata 480
ttcctcttca tcctgctgct atgcctcatc ttcttggttg ttcttctgga ctaccaaggt 540
atgttgcccg tttgtcctct acttccagga acatcaacca ccagcacggg gccatgcaag 600
acctgcacga ttctgtctca aggaacctct atgtttccct cttggtgctg tacaaaacct 660
tcggacagaa actgcacttg tattcccatc ccatcatcct gggctttcgc aagattccta 720
tgggagtggg cctcagtcgg tttctcctgg ctcagtttac tagtgccatt tgttcagtgg 780
ttcgtagggc tttccccccac tgtttggcct tcagttatat ggatgatgtg gtattggggg 840
ccaagtctgt acaacatctt gagtcccttt ttacctctat taccaatttt cttttgtctt 900
tgggtataca tt                                     912
```

<210> 171

<211> 304

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 171

```
Met Gly Gly Trp Ser Ser Lys Pro Arg Lys Gly Met Gly Thr Asn Leu
 1          5          10          15
Ser Val Pro Asn Pro Leu Gly Phe Phe Pro Asp His Gln Leu Asp Pro
          20          25          30
Ala Phe Gly Ala Asn Ser Asn Asn Pro Asp Trp Asp Phe Asn Pro Asn
          35          40          45
Lys Asp Gln Trp Pro Glu Ala Asn Gln Val Gly Ala Gly Gly Arg Trp
          50          55          60
Ser His Pro Gln Phe Glu Lys Ala Ala Ala Pro Ala Pro Asn Met Glu
          65          70          75          80
Asn Thr Thr Ser Gly Phe Leu Gly Pro Leu Leu Val Leu Gln Ala Gly
          85          90          95
Phe Phe Leu Leu Thr Arg Ile Leu Thr Ile Pro Gln Ser Leu Asp Ser
          100          105          110
Trp Trp Thr Ser Leu Asn Phe Leu Gly Gly Ala Pro Thr Cys Pro Gly
          115          120          125
Gln Asn Ser Gln Ser Pro Thr Ser Asn His Ser Pro Thr Ser Cys Pro
          130          135          140
Pro Ile Cys Pro Gly Tyr Arg Trp Met Cys Leu Arg Arg Phe Ile Ile
          145          150          155          160
Phe Leu Phe Ile Leu Leu Cys Leu Ile Phe Leu Leu Val Leu Leu
          165          170          175
Asp Tyr Gln Gly Met Leu Pro Val Cys Pro Leu Leu Pro Gly Thr Ser
```

## Sequence Listing.txt

180

185

190

Thr Thr Ser Thr Gly Pro Cys Lys Thr Cys Thr Ile Pro Ala Gln Gly  
 195 200  
 Thr Ser Met Phe Pro Ser Cys Cys Cys Thr Lys Pro Ser Asp Arg Asn  
 210 215 220  
 Cys Thr Cys Ile Pro Ile Pro Ser Ser Trp Ala Phe Ala Arg Phe Leu  
 225 230 235 240  
 Trp Glu Trp Ala Ser Val Arg Phe Ser Trp Leu Ser Leu Leu Val Pro  
 245 250 255  
 Phe Val Gln Trp Phe Val Gly Leu Ser Pro Thr Val Trp Leu Ser Val  
 260 265 270  
 Ile Trp Met Met Trp Tyr Trp Gly Pro Ser Leu Tyr Asn Ile Leu Ser  
 275 280 285  
 Pro Phe Leu Pro Leu Leu Pro Ile Phe Phe Cys Leu Trp Val Tyr Ile  
 290 295 300

&lt;210&gt; 172

&lt;211&gt; 912

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence:Artificially synthesized sequence

&lt;400&gt; 172

```

atgggagggtt ggtcttccaa acctcggaaa ggcattgggga cgaatctttc tgttcccaat 60
cctctgggat  tctttcccga tcaccagtgt gaccctgcgt tcggagccaa ctcaaacaat 120
ccagattggg  acttcaaccc caacaaggat caatggccag aggcaaatca ggtaggagcg 180
ggcggccgct  ggagccaccc gcagttcgaa aaagcggccg cccctgcacc gaacatggag 240
aacacaacat  caggattcct aggacccctg ctcgtgttac aggcgggggt tttcttggtg 300
acaagaatcc  tcacaatacc acagagtcta gactcgtggt ggacttctct caattttcta 360
gggggagcac  ccacgtgtcc tggccaaaat tcgcagtcct caacctccaa tcactcacca 420
acctctgtc  ctccaatttg tcctggctat cgctggatgt gtctgcggcg ttttatcata 480
ttctcttca  tcctgctgct atgcctcatc ttcttggttg ttcttctgga ctaccaaggt 540
atgttgccc  tttgtcctct acttccagga acatcaacca ccagcacggg gccatgcaag 600
acctgcacga  ttctgtctcg aggaacctct atgtttccct cttgttgctg tacaaaacct 660
tcggacagaa  actgcacttg tattcccatc ccatcatcct gggctttcgc aagattccta 720
tgggagtggg  cctcagtcct tttctcctgg ctcagtttac tagtgccatt tgttcagtgg 780
ttcgtagggc  tttccccac  tgtttggtt  tcagttatat ggatgatgtg gtattggggg 840
ccaagtctgt  acaacatctt gagtcccttt ttacctctat taccaatttt cttttgtctt 900
tgggtatata  tt
  
```

&lt;210&gt; 173

&lt;211&gt; 304

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence:Artificially synthesized sequence

&lt;400&gt; 173

Met Gly Gly Trp Ser Ser Lys Pro Arg Lys Gly Met Gly Thr Asn Leu

## Sequence Listing.txt

```

1           5           10           15
Ser Val Pro Asn Pro Leu Gly Phe Phe Pro Asp His Gln Leu Asp Pro
20          25          30
Ala Phe Gly Ala Asn Ser Asn Asn Pro Asp Trp Asp Phe Asn Pro Asn
35          40          45
Lys Asp Gln Trp Pro Glu Ala Asn Gln Val Gly Ala Gly Gly Arg Trp
50          55          60
Ser His Pro Gln Phe Glu Lys Ala Ala Ala Pro Ala Pro Asn Met Glu
65          70          75
Asn Thr Thr Ser Gly Phe Leu Gly Pro Leu Leu Val Leu Gln Ala Gly
85          90          95
Phe Phe Leu Leu Thr Arg Ile Leu Thr Ile Pro Gln Ser Leu Asp Ser
100         105        110
Trp Trp Thr Ser Leu Asn Phe Leu Gly Gly Ala Pro Thr Cys Pro Gly
115        120        125
Gln Asn Ser Gln Ser Pro Thr Ser Asn His Ser Pro Thr Ser Cys Pro
130        135        140
Pro Ile Cys Pro Gly Tyr Arg Trp Met Cys Leu Arg Arg Phe Ile Ile
145        150        155        160
Phe Leu Phe Ile Leu Leu Leu Cys Leu Ile Phe Leu Leu Val Leu Leu
165        170        175
Asp Tyr Gln Gly Met Leu Pro Val Cys Pro Leu Leu Pro Gly Thr Ser
180        185        190
Thr Thr Ser Thr Gly Pro Cys Lys Thr Cys Thr Ile Pro Ala Arg Gly
195        200        205
Thr Ser Met Phe Pro Ser Cys Cys Cys Thr Lys Pro Ser Asp Arg Asn
210        215        220
Cys Thr Cys Ile Pro Ile Pro Ser Ser Trp Ala Phe Ala Arg Phe Leu
225        230        235        240
Trp Glu Trp Ala Ser Val Arg Phe Ser Trp Leu Ser Leu Leu Val Pro
245        250        255
Phe Val Gln Trp Phe Val Gly Leu Ser Pro Thr Val Trp Leu Ser Val
260        265        270
Ile Trp Met Met Trp Tyr Trp Gly Pro Ser Leu Tyr Asn Ile Leu Ser
275        280        285
Pro Phe Leu Pro Leu Leu Pro Ile Phe Phe Cys Leu Trp Val Tyr Ile
290        295        300

```

&lt;210&gt; 174

&lt;211&gt; 1128

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 174

```

atggcctcgt acccccgcca tcaacacgcg tctgcgttcg accaggctgc gcgttctcgc 60
ggccatagca accgacgtac ggcgttgccg cctcgccggc agcaagaagc cacggaagtc 120
cgcccggagc agaaaatgcc cacgctactg cgggtttata tagacggtcc ccacgggatg 180
gggaaaacca ccaccacgca actgctgggtg gccctgggtt cgcgcgacga tatcgtctac 240
gtacccgagc cgatgactta ctggcgggtg ctgggggctt ccgagacaat cgcgaacatc 300
tacaccacac aacaccgcct cgaccagggt gagatatcgg ccggggacgc ggcggtggta 360
atgacaagcg cccagataac aatgggcatg ccttatgccg tgaccgacgc cgttctggct 420
cctcatatcg ggggggaggc tgggagctca catgccccgc ccccgccct caccctcatc 480
ttcgaccgcg atcccatcgt cgccctcctg tgctaccggg ccgcgcggtg ccttatgggc 540
agcatgaccc cccaggccgt gctggcgctt gtggccctca tcccgcgac cttgcccggc 600
accaacatcg tgcttggggc ctttccggag gacagacaca tcgaccgcct ggccaaacgc 660
cagcgccccg gcgagcggct ggacctggct atgctggctg cgattcgccg cgtttacggg 720
ctacttgcca atacggtgcg gtatctgcag tgcggcgggt cgtggcggga ggactgggga 780
cagctttcgg ggacggccgt gccgccccg ggtgccgagc cccagagcaa cgcgggcccc 840
cgaccccata tcggggacac gttatttacc ctgtttcggg cccccgagtt gctggccccc 900
aacggcgacc tgtataacgt gtttgccttg gccttggacg tcttggccaa acgcctccgt 960
tccatgcacg tctttatcct ggattacgac caatcgcccc ccggtgccg ggacgccctg 1020
ctgcaactta cctccgggat ggtccagacc cacgtcacca ccccggtc cataccgacg 1080
atatgcgacc tggcgcgcac gtttggcccg gagatggggg aggctaac 1128

```

<210> 175

<211> 1128

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 175

```

atggcctcgt acccctgcca tcaacacgcg tctgcgttcg accaggctgc gcgttctcgc 60
ggccatagca accgacgtac ggcgttgccg cctcgccggc agcaagaagc cacggaagtc 120
cgccctggagc agaaaatgcc cacgctactg cgggtttata tagacggtcc tcacgggatg 180
gggaaaacca ccaccacgca actgctgggtg gccctgggtt cgcgcgacga tatcgtctac 240
gtacccgagc cgatgactta ctggcagggt ctgggggctt ccgagacaat cgcgaacatc 300
tacaccacac aacaccgcct cgaccagggt gagatatcgg ccggggacgc ggcggtggta 360
atgacaagcg cccagataac aatgggcatg ccttatgccg tgaccgacgc cgttctggct 420
cctcatgtcg ggggggaggc tgggagttca catgccccgc ccccgccct caccctcatc 480
ttcgaccgcg atcccatcgt cgccctcctg tgctaccggg ccgcgcgata ccttatgggc 540
agcatgaccc cccaggccgt gctggcgctt gtggccctca tcccgcgac cttgcccggc 600
acaaacatcg tgttgggggc ctttccggag gacagacaca tcgaccgcct ggccaaacgc 660
cagcgccccg gcgagcggct tgacctggct atgctggccg cgattcgccg cgtttacggg 720
ctgcttgcca atacggtgcg gtatctgcag ggcggcgggt cgtggtggga ggattgggga 780
cagctttcgg ggacggccgt gccgccccg ggtgccgagc cccagagcaa cgcgggcccc 840
cgaccccata tcggggacac gttatttacc ctgtttcggg cccccgagtt gctggccccc 900
aacggcgacc tgtataacgt gtttgccttg gccttggacg tcttggccaa acgcctccgt 960
cccatgcacg tctttatcct ggattacgac caatcgcccc ccggtgccg ggacgccctg 1020
ctgcaactta cctccgggat ggtccagacc cacgtcacca ccccggtc cataccgacg 1080
atctgcgacc tggcgcgcac gtttggcccg gagatggggg aggctaac 1128

```

<210> 176

<211> 1128

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially



## Sequence Listing.txt

## synthesized sequence

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<400> 176
atggcttcgt accccgcca tcaacacgcg tctgcgttcg accaggctgc gcgttctcgc 60
ggccatagca accgacgtac ggcgttgccg cctcgccggc agcaagaagc cacggaagtc 120
cgcccggagc agaaaatgcc cacgctactg cgggtttata tagacggtcc ccacgggatg 180
gggaaaacca ccaccacgca actgctgggt gccctgggtt cgcgcgacga tatcgtctac 240
gtacccgagc cgatgactta ctggcgggtg ctgggggctt ccgagacaat cgcgaacatc 300
tacaccacac aacaccgcct cgaccagggt gagatatcgg ccggggacgc ggcggtggtg 360
atgacaagcg cccagataac aatgggcatg ccttatgccg tgaccgacgc cgttctggct 420
cctcatatcg ggggggaggc tgggagctca catgccccgc ccccgccctt caccctcatc 480
ttcgaccgcc atcccatcgc cgccctcctg tgctaccggg ccgcgcggtg ccttatgggc 540
agcatgaccc cccaggccgt gctggcgctt gtggccctca tcccgccgac cttgcccggc 600
accaacatcg tgcctggggc ccttccggag gacagacaca tcgaccgcct ggccaaacgc 660
cagcgccccg gcgagcggct ggacctggct atgctggctg cgattcgccg cgtttacggg 720
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aacggcgacc tgtataacgt gtttgccctg gccttgacg tcttgccaa acgcctccgt 960
tccatgcacg tctttatcct ggattacgac caatgcgccg ccggtgccg ggacgccctg 1020
ctgcaactta cctccgggat ggtccagacc cacgtacca ccccggtc ccatccgacg 1080
atatgcgacc tggcgcgcac gtttgcccgg gagatggggg aggctaac 1128

```

<210> 177

<211> 1128

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially synthesized sequence

```

<400> 177
atggcttcgt acccctgcca tcaacacgcg tctgcgttcg accaggctgc gcgttctcgc 60
ggccatagca accgacgtac ggcgttgccg cctcgccggc agcaagaagc cacggaagtc 120
cgcttgagc agaaaatgcc cacgctactg cgggtttata tagacggtcc tcacgggatg 180
gggaaaacca ccaccacgca actgctgggt gccctgggtt cgcgcgacga tatcgtctac 240
gtacccgatc cgatgactta ctggcagggt ctgggggctt ccgagacaat cgcgaacatc 300
tacaccacac aacaccgcct cgaccagggt gagatatcgg ccggggacgc ggcggtggtg 360
atgacaagcg cccagataac aatgggcatg ccttatgccg tgaccgacgc cgttctggct 420
cctcatatcg ggggggaggc tgggagctca catgccccgc ccccgccctt caccctcatc 480
ttcgaccgcc atcccatcgc cgccctcctg tgctaccggg ccgcgcgata ccttatgggc 540
agcatgaccc cccaggccgt gctggcgctt gtggccctca tcccgccgac cttgcccggc 600
acaaacatcg tgttgggggc ccttccggag gacagacaca tcgaccgcct ggccaaacgc 660
cagcgccccg gcgagcggct tgacctggct atgctggccg cgattcgccg cgtttacggg 720
ctgcttgcca atacgggtgc gtatctgcag ggcggcgggt cgtggcggga ggattgggga 780
cagctttcgg ggacggccgt gccgccccag ggtgccgagc cccagagcaa cgcgggcccc 840
cgaccccata tcggggacac gttatttacc ctgtttcggg cccccgagtt gctggcccc 900
aacggcgacc tgtataacgt gtttgccctg gccttgacg tcttgccaa acgcctccgt 960
cccatgcacg tctttatcct ggattacgac caatgcgccg ccggtgccg ggacgccctg 1020
ctgcaactta cctccgggat ggtccagacc cacgtacca ccccggtc ccatccgacg 1080
atctgcgacc tggcgcgcac gtttgcccgg gagatggggg aggctaac 1128

```

<210> 178

<211> 1128

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially synthesized sequence

# Sequence Listing.txt

<400> 178

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atggcttcgt accccggcca tcagcacgcg tctgcgttcg accaggctgc gcgttctcgc 60
ggccatagca accgacgtac ggcgttgccg cctcgccggc agcaagaagc cacggaagtc 120
cgaccggagc agaaaatgcc cacgctactg cgggtttata tagacggtcc ccacgggatg 180
gggaaaacca ccaccacgca actgctgggtg gccctggggt cgcgcgacga tatcgtctac 240
gtacccgagc cgatgactta ctggcggggtg ttcgggggctt ccgagacaat cgcgaacatc 300
tacaccacac aacaccgcct cgaccaggtg gagatatcgg ccggggacgc ggcggtggtg 360
atgacaagcg cccagataac aatgggcatg ccttatgccg tgaccgacgc cgttctggct 420
cctcatatcg ggggggaggc tgggagctca catgccccgc ccccgccct caccctcatc 480
ttcgaccgcc atcccatcgc cgccctcctg tgctaccggc ccgcgcgata ccttatgggc 540
agcatgacct cccaggccgt gctggcggtc gtggccctca tcccgcgcac cttgcccggc 600
acaaacatcg tgttgggggc ccttccggag gacagacaca tcgaccgcct ggccaaacgc 660
cagcgccccg gcgagcggct tgacctggct atgctggccg cgattcgccg cgtttacggg 720
ctgcttgcca atacggtgcg gtatctgcag ggcggcgggt cgtggcggga ggattgggga 780
cagctttcgg ggacggccgt gccgccccag ggtgccgagc cccagagcaa cgcgggcccc 840
cgacccccaca tcggggacac gttatttacc ctgtttcggg cccccgagtt gctggccccc 900
aacggcgacc tgtataacgt gtttgccctg gccttggacg tcttggccaa acgcctccgt 960
cccatgcacg tctttatcct ggattacgac caatcgcccg ccggtgcccg ggacgccctg 1020
ctgcaactta cctccgggat ggtccagacc cacgtcacca cccaggctc cataccgacg 1080
atctgcgacc tggcgcgcac gtttggcccg gagatggggg aggctaac 1128
```

<210> 179

<211> 1128

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 179

```
atggcttcgt acccctgcca tcaacacgcg tctgcgttcg accaggctgc gcgttctcgc 60
ggccatagca accgacgtac ggcgttgccg cctcgccggc agcaagaagc cacggaagtc 120
cgcttgagc agaaaatgcc cacgctactg cgggtttata tagacggtcc tcacgggatg 180
gggaaaacca ccaccacgca actgctgggtg gccctggggt cgcgcgacga tatcgtctac 240
gtacccgagc cgatgactta ctggcggggtg ttcgggggctt ccgagacaat cgcgaacatc 300
tacaccacac aacaccgcct cgaccaggtg gagatatcgg ccggggacgc ggcggtggtg 360
atgacaagcg cccagataac aatgggcatg ccttatgccg tgaccgacgc cgttctggct 420
cctcatatcg ggggggaggc tgggagctca catgccccgc ccccgccct caccctcatc 480
ttcgaccgcc atcccatcgc cgccctcctg tgctaccggc ccgcgcgata ccttatgggc 540
agcatgacct cccaggccgt gctggcggtc gtggccctca tcccgcgcac cttgcccggc 600
acaaacatcg tgttgggggc ccttccggag gacagacaca tcgaccgcct ggccaaacgc 660
cagcgccccg gcgagcggct tgacctggct atgctggccg cgattcgccg cgtttacggg 720
ctgcttgcca atacggtgcg gtatctgcag ggcggcgggt cgtggcggga ggattgggga 780
cagctttcgg ggacggccgt gccgccccag ggtgccgagc cccagagcaa cgcgggcccc 840
cgacccccata tcggggacac gttatttacc ctgtttcggg cccccgagtt gctggccccc 900
aacggcgacc tgtataacgt gtttgccctg gccttggacg tcttggccaa acgcctccgt 960
cccatgcacg tctttatcct ggattacgac caatcgcccg ccggtgcccg ggacgccctg 1020
ctgcaactta cctccgggat ggtccagacc cacgtcacca cccaggctc cataccgacg 1080
atctgcgacc tggcgcgcac gtttggcccg gagatggggg aggctaac 1128
```

<210> 180

<211> 1128

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially synthesized sequence

## Sequence Listing.txt

&lt;400&gt; 180

```

atggcttcgt acccctgcca tcaacacgcg tctgcgttcg accaggctgc gcgttctcgc 60
ggccatagca accgacgtac ggcgttgccg cctcgccggc agcaagaagc cacggaagtc 120
cgcctggagc agaaaatgcc cacgctactg cgggtttata tagacggtcc tcacgggatg 180
gggaaaacca ccaccacgca actgctgggt gccctggggt cgcgcgacga tatcgtctac 240
gtacccgagc cgatgactta ctggcagggt ctgggggctt ccgagacaat cgcgaacatc 300
tacaccacac aacaccgcct cgaccagggt gagatatcgg ccggggacgc ggcggtggtg 360
atgacaagcg ccagataaac aatgggcatg ccttatgccg tgaccgacgc cgttctggct 420
cctcatatcg ggggggagcg tgggagctca catgccccgc ccccgccctt caccctcatc 480
ttcgaccgcc atcccatcgc cgccctcctg tgctaccggg ccgcgcgata ccttatgggc 540
agcatgaccc ccaggccggt gctggcgctt gtggccctca tcccgccgac cttgcccggc 600
acaaacatcg tgttgggggc ctttccggag gacagacaca tcgaccgcct ggccaaacgc 660
cagcgccccg gcgagcggct tgacctggct atgctggccg cgattcgccg cgtttacggg 720
ctgcttgcca atacggtgcg gtatctgcag ggcggcgggt cgtggcggga ggattgggga 780
cagctttcgg ggacggccgt gccgccccag ggtgccgagc cccagagcaa cgcgggcccc 840
cgaccccata tcggggacac gttatttacc ctgtttcggg cccccgagtt gctggcccc 900
aacggcgacc tgtataacgt gtttgccctg gccttgagc tcttgccaa acgcctccgt 960
cccatgcacg tctttatcct ggattacgac caatcgccc cggctgccg ggacgccctg 1020
ctgcaactta cctccgggat ggtccagacc cacgtacca cccaggctc cataccgacg 1080
atctgcgacc tggcgcgcac gtttgcccgg gagatggggg aggctaac 1128

```

&lt;210&gt; 181

&lt;211&gt; 1128

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence:Artificially synthesized sequence

&lt;400&gt; 181

```

atggcttcgt acccctgcca tcaacacgcg tctgcgttcg accaggctgc gcgttctcgc 60
ggccatagca accgacgtac ggcgttgccg cctcgccggc agcaagaagc cacggaagtc 120
cgcctggagc agaaaatgcc cacgctactg cgggtttata tagacggtcc tcacgggatg 180
gggaaaacca ccaccacgca actgctgggt gccctggggt cgcgcgacga tatcgtctac 240
gtacccgagc cgatgactta ctggcagggt ctgggggctt ccgagacaat cgcgaacatc 300
tacaccacac aacaccgcct cgaccagggt gagatatcgg ccggggatgc ggcggtggtg 360
atgacaagcg ccagataaac aatgggcatg ccttatgccg tgaccgacgc cgttctggct 420
cctcatatcg ggggggagcg tgggagctca catgccccgc ccccgccctt caccctcatc 480
ttcgaccgcc atcccatcgc cgccctcctg tgctaccggg ccgcgcgata ccttatgggc 540
agcatgaccc ccaggccggt gctggcgctt gtggccctca tcccgccgac cttgcccggc 600
acaaacatcg tgttgggggc ctttccggag gacagacaca tcgaccgcct ggccaaacgc 660
cagcgccccg gcgagcggct tgacctggct atgctggccg cgattcgccg cgtttacggg 720
ctgcttgcca atacggtgcg gtatctgcag ggcggcgggt cgtggcggga ggattgggga 780
cagctttcgg ggacggccgt gccgccccag ggtgccgagc cccagagcaa cgcgggcccc 840
cgaccccata tcggggacac gttatttacc ctgtttcggg cccccgagtt gctggcccc 900
aacggcgacc tgtataacgt gtttgccctg gccttgagc tcttgccaa acgcctccgt 960
cccatgcacg tctttatcct ggattacgac caatcgccc cggctgccg ggacgccctg 1020
ctgcaactta cctccgggat ggtccagacc cacgtacca cccaggctc cataccgacg 1080
atctgcgacc tggcgcgcac gtttgcccgg gagatggggg aggctaac 1128

```

&lt;210&gt; 182

&lt;211&gt; 1128

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence:Artificially synthesized sequence

&lt;400&gt; 182

# Sequence Listing.txt

```

atggcttcgt acccctgcca tcaacacgcg tctgcgttcg accaggctgc gcgttctcgc 60
ggccataaca accgacgtac ggcgttgccg cctcgccggc agcaagaagc cacggaagtc 120
cgcttgagc agaaaatgcc cacgctactg cgggtttata tagacggtcc tcacgggatg 180
gggaaaacca ccaccacgca actgctggtg gccctgggtt cgcgcgacga tatcgtctac 240
gtacccgagc cgatgactta ctggcagggt ctgggggctt ccgagacaat cgcgaacatc 300
tacaccacac aacaccgcct cgaccagggt gagatatcgg ccggggatgc ggcggtggtg 360
atgacaagcg cccagataac aatgggcatg ccttatgccg taaccgacgc cgttctggct 420
cctcatatcg ggggggaggc tgggagctca catgccccgc ccccgccctt caccctcatc 480
ttcgaccgcc atcccatcgc cgccctcctg tgctacccgg ccgcgcgata ccttatgggc 540
agcatgaccc cccaggccgt gctggcgctt ttggccctca tcccgccgac cttgcccggc 600
acaaacatcg tgttgggggc ctttccggag gacagacaca tcgaccgcct ggccaaacgc 660
cagcgccccg gcgagcggct tgacctggct atgctggccg cgattcgccg cgtttacggg 720
ctgcttgcca atacggtgcg gtatctgcag ggcggcgggt cgtggcggga ggattgggga 780
cagctttcgg ggacggccgt gccgccccag ggtgccgagc cccagagcaa cgcgggcccc 840
cgaccccata tcgggggacac gttatttacc ctgtttcggg cccccgagtt gctggcccc 900
aacggcgacc tgtataacgt gtttgccctg gccttgagc tcttgccaa acgcctccgt 960
cccatgcacg tctttatcct ggattacgac caatcgccc cggctgccg ggacgccctg 1020
ctgcaactta cctccgggat ggtccagacc cacgtacca cccaggctc cataccgacg 1080
atctgcgacc tggcgcgcac gtttgcccgg gagatggggg aggctaac 1128

```

<210> 183

<211> 1128

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 183

```

atggcttcgt acccctgcca tcaacacgcg tctgcgttcg accaggctgc gcgttctcgc 60
ggccatagca accgacgtac ggcgttgccg cctcgccggc agcaagaagc cacggaagtc 120
cacctggagc agaaaatgcc cacgctactg cgggtttata tagacggtcc tcacgggatg 180
gggaaaacca ccaccacgca actgctggtg gccctgggtt cgcgcgacga tatcgtctac 240
gtacccgagc cgatgactta ctggcagggt ctgggggctt ccgagacaat cgcgaacatc 300
tacaccacac aacaccgcct cgaccagggt gagatatcgg ccggggacgc ggcggtggtg 360
atgacaagcg cccagataac aatgggcatg ccttatgccg tgaccgacgc cgttctggct 420
cctcatatcg ggggggaggc tgggagctca catgccccgc ccccgccctt caccctcatc 480
ttcgaccgcc atcccatcgc cgccctcctg tgctacccgg ccgcgcgata ccttatgggc 540
agcatgaccc cccaggccgt gctggcgctt gtggccctca tcccgccgac cttgcccggc 600
acaaacatcg tgttgggggc ctttccggag gacagacaca tcgaccgcct ggccaaacgc 660
cagcgccccg gcgagcggct tgacctggct atgctggccg cgattcgccg cgtttacggg 720
ctgcttgcca atacggtgcg gtatctgcag ggcggcgggt cgtggcggga ggattgggga 780
cagctttcgg ggacggccgt gccacccag ggtgccgagc cccagagcaa cgcgggcccc 840
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aacggcgacc tgtataacgt gtttgccctg gccttgagc tcttgccag acgcctccgt 960
cccatgcacg tctttatcct ggattacgac caatcgccc cggctgccg ggacgccctg 1020
ctgcaactta cctccgggat ggtccagacc cacgtacca cccaggctc cataccgacg 1080
atctgcgacc tggcgcgcac gtttgcccgg gagatggggg aggctaac 1128

```

<210> 184

<211> 1128

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 184

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atggcttcgt acccctgcca tcaacacgcg tctgcgttcg accaggctgc gcgttctcgc 60

```

# Sequence Listing.txt

```

ggccatagca accgacgtac ggcgttgccg cctcgccggc agcaagaagc cacggaagtc 120
cgcttgaggc agaaaatgcc cacgctactg cgggtttata tagacggtcc tcacgggatg 180
gggaaaacca ccaccacgca actgctgggt gccctgggtt cgcgcgacga tatcgtctac 240
gtacccgagc cgatgactta ctggcagggt ctgggggctt ccgagacaat cgcgaacatc 300
tacaccacac aacaccgcct cgaccagggt gagatatcgg ccggggacgc ggcggtggtg 360
atgacaagcg cccagataac aatgggcatg ccttatgccg tgaccgacgc cgttctggct 420
ctcatatcgg ggggggaggc tgggagctca catgccccgc cccggccctt caccctcatc 480
ttcgaccgcc atcccatcgc cgccctcctg tgctaccggg ccgcgcgata ccttatgggc 540
agcatgaccc cccaggccgt gctggcgctt gtggccctca tcccgccgac cttgcccggc 600
acaaacatcg tgttgggggc cttccagag gacaaacaca tcgaccgcct ggccaaacgc 660
cagcgccccg gcgagcggct tgacctggct atgctggccg cgattcgccg cgtttacggg 720
ctgcttgctc atacggtgct gtatctgcag ggcggcgggt cgtggcggga ggattgggga 780
cagctttcgg ggacggccgt gccgccccag ggtgccgagc cccagagcaa cgcgggcca 840
cgaccccata tcgggggacac gttatttacc ctgtttcggg cccccgagtt gctggcccc 900
aacggcgacc tgtataacgt gtttgccctg gccttgagc tcttgccaa acgcctccgt 960
cccatgcacg tctttatcct ggattacgac caatcgcccg ccggtgccg ggacgccctg 1020
ctgcaactta cctccgggat ggtccagacc cacgtcacca cccaggctc cataccgacg 1080
atctgcgacc tggcgcgcac gtttgcccgg gagatggggg aggctaac 1128

```

<210> 185

<211> 1128

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 185

```

atggcttcgt acccctgcca tcaacacgct tctgcgttcg accaggctgc gcgttctcgc 60
ggccatagca accgacgtac ggcgttgccg cctcgccggc agcaagaagc cacggaagtc 120
cgcttgaggc agaaaatgcc cacgctactg cgggtttata tagacggtcc tcacgggatg 180
gggaaaacca ccaccacgca actgctgggt gccctgggtt cgcgcgacga tatcgtctac 240
gtacccgagc cgatgactta ctggcagggt ctgggggctt ccgagacaat cgcgaacatc 300
tacaccacac aacaccgcct cgaccagggt gagatatcgg ccggggacgc ggcggtggtg 360
atgacaagcg cccagataac aatgggcatg ccttatgccg tgaccgacgc cgttctggct 420
ctcatatcgg ggggggaggc tgggagctca catgccccgc cccggccctt caccctcatc 480
ttcgaccgcc atcccatcgc cgccctcctg tgctaccggg ccgcgcgata ccttatgggc 540
agcatgaccc cccaggccgt gctggcgctt gtggccctca tcccgccgac cttgcccggc 600
acaaacatcg tgttgggggc cttccggag gacagacaca tcgaccgcct ggccaaacgc 660
cagcgccccg gcgagcggct tgacctggct atgctggccg cgattcgccg cgtttacggg 720
ctgcttgcca atacggtgct gtatctgcag ggcggcgggt cgtggcggga ggattgggga 780
cagctttcgg ggacggccgt gccgccccag ggtgccgagc cccagagcaa cgcgggcca 840
cgaccccata tcgggggacac gttatttacc ctgtttcggg cccccgagtt gctggcccc 900
aacggcgacc tgtataacgt gtttgccctg gccttgagc tcttgccaa acgcctccgt 960
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ctgcaactta cctccgggat ggtccagacc cacgtcacca cccaggctc cataccgacg 1080
atctgcgacc tggcgcgcac gtttgcccgg gagatggggg aggctaac 1128

```

<210> 186

<211> 1128

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 186

```

atggcttcgt acccctgcca tcaacacgct tctgcgttcg accaggctgc gcgttctcgc 60
ggccatagca accgacgtac ggcgttgccg cctcgccggc agcaagaagc cacggaagtc 120

```

# Sequence Listing.txt

```

cgcttggagc agaaaatgcc cacgctactg cgggtttata tagacggtcc tcacgggatg 180
gggaaaacca ccaccacgca actgctgggtg gccctgggtt cgcgcgacga tatcgtctac 240
gtacccgagc cgatgactta ctggcaggtg ctgggggctt ccgagacaat cgcgaacatc 300
tacaccacac aacaccgcct cgaccaggtg gagatatcgg ccggggacgc ggcggtggta 360
atgacaagcg cccagataac aatgggcatg ccttatgccc tgaccgacgc cgttctggct 420
cctcatatcg ggggggaggc tgggagctca catgccccgc ccccgccct caccctcatc 480
ttcgaccgcc atcccatcgc cgccctcctg tgctaccggg ccgcgcgata ccttatgggc 540
agcatgaccc cccaggccgt gctggcgctt gtggccctca tcccgccgac cttgcccggc 600
acaaacatcg tgttgggggc ctttccggag gacagacaca ttgaccgcct ggccaaacgc 660
cagcgccccg gcgagcggct tgacctggct atgctagccg cgattcgccg cgtttacggg 720
ctgcttgcca atacggtgcg gtatctgcag ggcggcgggt cgtggcggga ggattgggga 780
cagctttcgg ggacggccgt gccgccccag ggtgccgagc cccagagcaa cgcgggcccc 840
cgaccccata tcggggacac gttatttacc ctgtttcggg cccccgagtt gctggcccc 900
aacggcgacc tgtataacgt gtttgccctg gccttgagc tcttgccaa acgcctccgt 960
cccatgcacg tctttatcct ggattacgac caatcgcccg ccggtgccc ggacgccctg 1020
ctgcaactta cctccgggat ggtccagacc cacgtcacca cccaggctc cataccgacg 1080
atctgcgacc tggcgcgcac gtttgcccgg gagatggggg aggctaac 1128

```

<210> 187

<211> 1128

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 187

```

atggcttcgt acccctgcca tcaacacgcg tctgcgttcg accaggctgc gcgttctcgc 60
ggccatagca accgacgtac ggcgttcgcg cctcgccggc agcaagaagc cacggaagtc 120
cgcttggagc agaaaatgcc cacgctactg cgggtttata tagacggtcc tcacgggatg 180
gggaaaacca ccaccacgca actgctgggtg gccctgggtt cgcgcgacga tatcgtctac 240
gtacccgagc cgatgactta ctggcaggtg ctgggggctt ccgagacaat cgcgaacatc 300
tacaccacac aacaccgcct cgaccaggtg gagatatcgg ccggggacgc ggcggtggta 360
atgacaagcg cccagataac aatgggcatg ccttatgccc tgaccgacgc cgttctggct 420
cctcatatcg ggggggaggc tgggagctca catgccccgc ccccgccct caccctcatc 480
ttcgaccgcc atcccatcgc cgccctcctg tgctaccggg ccgcgcgata ccttatgggc 540
agcatgaccc cccaggccgt gctggcgctt gtggccctca tcccgccgac cttgcccggc 600
acaaacatcg tgttgggggc ctttccggag gacagacaca ttgaccgcct ggccaaacgc 660
cagcgccccg gcgagcggct tgacctggct atgctggccg cgattcgccg cgtttacggg 720
ctgcttgcca atacggtgcg gtatctgcag ggcggcgggt cgtggcggga ggattgggga 780
cagctttcgg ggacggccgt gccgccccag ggtgccgagc cccagagcaa cgcgggcccc 840
cgaccccata tcggggacac gttatttacc ctgtttcggg cccccgagtt gctggcccc 900
aacggcgacc tgtataacgt gtttgccctg gccttgagc tcttgccaa acgcctccgt 960
cccatgcacg tctttatcct ggattacgac caatcgcccg ccggtgccc ggacgccctg 1020
ctgcaactta cctccgggat ggtccagacc cacgtcacca cccaggctc cataccgacg 1080
atctgcgacc tggcgcgcac gtttgcccgg gagatggggg aggctaac 1128

```

<210> 188

<211> 1128

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 188

```

atggcttcgt acccctgcca tcaacacgcg tctgcgttcg accaggctgc gcgttctcgc 60
ggccatagca accgacgtac ggcgttcgcg cctcgccggc agcaagaagc cacggaagtc 120
cgcttggagc agaaaatgcc cacgctactg cgggtttata tagacggtcc tcacgggatg 180

```

# Sequence Listing.txt

```

gggaaaacca ccaccacgca actgctggtg gccctgggtt cgcgcgacga tatcgtctac 240
gtaccccgagc cgatgactta ctggcaggtg ctgggggctt ccgagacaat cgcgaacatc 300
tacaccacac aacaccgcct cgaccaggtg gagatatcgg ccggggacgc ggcggtggtg 360
atgacaagcg cccagataac aatgggcatg ccttatgccg tgaccgacgc cgttctggct 420
cctcatatcg ggggggaggc tgggagctca catgccccgc ccccgccctt caccctcatc 480
ttcgaccgcc atcccatcgc cgccctcctt tgctaccggg ccgcgcgata ccttatgggc 540
agcatgaccc cccaggccgt gctggcggtc gtggccctca tcccgccgac cttgcccggc 600
acaaacatcg tgttgggggc ccttcgggag gacagacaca ttgaccgcct ggccaaacgc 660
cagcgccccg gcgagcggct tgacctggct atgctggccg cgattcgccg cgtttacggg 720
ctgcttgcca atacggtgcg gtatctgcag ggcggggggt cgtggcgggg ggattgggga 780
cagctttcgg ggacggccgt gccgccccag ggtgccgagc cccagagcaa cgcgggccca 840
cgaccccata tcggggacac gttatttacc ctgtttcggg cccccgagtt gctggccccc 900
aacggcgacc tgtataacgt gtttgccctg gccttgagc tcttgcccaa acgcctccgt 960
cccattgcacg tctttatcct ggattacgac caatcgcccc ccggtgccg ggacgccctg 1020
ctgcaactta cctccgggat ggtccagacc cacgtcacca cccaggtctc cataccgacg 1080
atctgcgacc tggcgcgcac gtttgcccgg gagatggggg aggctaac 1128

```

<210> 189

<211> 1128

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 189

```

atggcttcgt acccctgcc tcaacacgcg tctgcgttcg accaggctgc gcgttctcgc 60
ggccatagca accgacgtac ggcgttcgc cctcgccggc agcaagaagc cacggaagtc 120
cgcctggagc agaaaatgcc cacgctactg cgggtttata tagacggtcc tcacgggatg 180
gggaaaacca ccaccacgca actgctggtg gccctgggtt cgcgcgacga tatcgtctac 240
gtaccccgagc cgatgactta ctggcaggtg ctgggggctt ccgagacaat cgcgaacatc 300
tacaccacac aacaccgcct cgaccaggtg gagatatcgg ccggggacgc ggcggtggtg 360
atgacaagcg cccagataac aatgggcatg ccttatgccg tgaccgacgc cgttctggct 420
cctcatatcg ggggggaggc tgggagctca catgccccgc ccccgccctt caccctcatc 480
ttcgaccgcc atcccatcgc cgccctcctt tgctaccggg ccgcgcgata ccttatgggc 540
agcatgaccc cccaggccgt gctggcggtc gtggccctca tcccgccgac cttgcccggc 600
acaaacatcg tgttgggggc ccttcgggag gacagacaca tcgaccgcct ggccaaacgc 660
cagcgccccg gcgagcggct tgacctggct atgctagccg cgattcgccg cgtttacggg 720
ctgcttgcca atacggtgcg gtatctgcag ggcggggggt cgtggcgggg ggattgggga 780
cagctttcgg ggacggccgt gccgccccag ggtgccgagc cccagagcaa cgcgggccca 840
cgaccccata tcggggacac gttatttacc ctgtttcggg cccccgagtt gctggccccc 900
aacggcgacc tgtataacgt gtttgccctg gccttgagc tcttgcccaa acgcctccgt 960
cccattgcacg tctttatcct ggattacgac caatcgcccc ccggtgccg ggacgccctg 1020
ctgcaactta cctccgggat ggtccagacc cacgtcacca cccaggtctc cataccgacg 1080
atctgcgacc tggcgcgcac gtttgcccgg gagatggggg aggctaac 1128

```

<210> 190

<211> 1128

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 190

```

atggcttcgt acccctgcc tcaacacgcg tctgcgttcg accaggctgc gcgttctcgc 60
ggccatagca accgacgtac ggcgttcgc cctcgccggc agcaagaagc cacggaagtc 120
cgcctggagc agaaaatgcc cacgctactg cgggtttata tagacggtcc tcacgggatg 180
gggaaaacca ccaccacgca actgctggtg gccctgggtt cgcgcgacga tatcgtctac 240

```

# Sequence Listing.txt

```

gtaccccgagc cgatgactta ctggcaggtg ctgggggctt ccgagacaat cgcgaacatc 300
tacaccacac aacaccgcct cgaccagggg gagatatcgg ccggggacgc ggcggtggta 360
atgacaagcg cccagataac aatgggcatg ccttatgccg tgaccgacgc cgttctggct 420
cctcataatcg ggggggaggc tgggagctca catgccccgc ccccggccct caccctcatc 480
ttcgaccgcc atcccatcgc cgccctcctg tgctaccggc ccgcgcgata ccttatgggc 540
agcatgaccc cccaggccgt gctggcggtc gtggccctca tcccgccgac cttgcccggc 600
acaaacatcg tgttgggggc ccttccggag gacagacaca tcgaccgcct ggccaaacgc 660
cagcgccccg gcgagcggct tgacctggct atgctagccg cgattcgccg cgtttacggg 720
ctgcttgcca atacggtgcg gtatctgcag ggcggcgggt cgtggcggga ggattgggga 780
cagctttcgg ggacggccgt gccgccccag ggtgccgagc cccagagcaa cgcggaccca 840
cgaccccata tcggggacac gttatttacc ctgtttcggg cccccgagtt gctggcccc 900
aacggcgacc tgtataacgt gtttgcctgg gccttggacg tcttgccaa acgcctccgt 960
cccattgcag tctttatcct ggattacgac caatcgccc cggctgccg ggacgccctg 1020
ctgcaactta cctccgggat ggtccagacc cacgtcacca cccaggctc cataccgacg 1080
atctgcgacc tggcgcgcac gtttggccgg gagatggggg aggctaac 1128

```

<210> 191

<211> 1128

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 191

```

atggcttcgt acccctgcca tcaacacgcg tctgcgttcg accaggctgc gcgttctcgc 60
ggccatagca accgacgtac ggcgttgccg cctcgccggc agcaagaagc cacggaagtc 120
cgcttgagc agaaaatgcc cacgctactg cgggtttata tagacggtcc tcacgggatg 180
gggaaaacca ccaccacgca actgctggtg gccctgggtt cgcgcgacga tatcgtctac 240
gtacccgagc cgatgactta ctggcaggtg ctgggggctt ccgagacaat cgcgaacatc 300
tacaccacac aacaccgcct cgaccagggg gagatatcgg ccggggacgc ggcggtggta 360
atgacaagcg cccagataac aatgggcatg ccttatgccg tgaccgacgc cgttctggct 420
cctcataatcg ggggggaggc tgggagctca catgccccgc ccccggccct caccctcatc 480
ttcgaccgcc atcccatcgc cgccctcctg tgctaccggc ccgcgcgata ccttatgggc 540
agcatgaccc cccaggccgt gctggcggtc gtggccctca tcccgccgac cttgcccggc 600
acaaacatcg tgttgggggc ccttccggag gacagacaca tcgaccgcct ggccaaacgc 660
cagcgccccg gcgagcggct tgacctggct atgctagccg cgattcgccg cgtttacggg 720
ctgcttgcca atacggtgcg gtatctgcag ggcggcgggt cgtggcggga ggattgggga 780
cagctttcgg ggacggccgt gccgccccag gttgccgagc cccagagcaa cgcggaccca 840
cgaccccata tcggggacac gttatttacc ctgtttcggg cccccgagtt gctggcccc 900
aacggcgacc tgtataacgt gtttgcctgg gccttggacg tcttgccaa acgcctccgt 960
cccattgcag tctttatcct ggattacgac caatcgccc cggctgccg ggacgccctg 1020
ctgcaactta cctccgggat ggtccagacc cacgtcacca cccaggctc cataccgacg 1080
atctgcgacc tggcgcgcac gtttggccgg gagatggggg aggctaac 1128

```

<210> 192

<211> 1128

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 192

```

atggcttcgt acccctgcca tcaacacgcg tctgcgttcg accaggctgc gcgttctcgc 60
ggccatagca accgacgtac ggcgttgccg cctcgccggc agcaagaagc cacggaagtc 120
cgcttgagc agaaaatgcc cacgctactg cgggtttata tagacggtcc tcacgggatg 180
gggaaaacca ccaccacgca actgctggtg gccctgggtt cgcgcgacga tatcgtctac 240
gtacccgagc cgatgactta ctggcaggtg ctgggggctt ccgagacaat cgcgaacatc 300

```



# Sequence Listing.txt

```

tacaccacac aacaccgcct cgaccagggt gagatatcgg ccggggacgc ggcggtggtgta 360
atgacaagcg cccagataaac aatgggcatg ccttatgccg tgaccgacgc cgttctggct 420
cctcatatcg ggggggaggc tgggagctca catgccccgc ccccgccctt catcctcatc 480
ttcgaccgcc atcccatcgc cgccctcctg tgctaccggg ccgcgcgata ccttatgggc 540
agcatgaccc cccaggccgt gctggcggtt gtggccctca tcccgcgcac cttgcccggc 600
acaaacatcg tgttgggggc ccttccggag gacagacaca tcgaccgcct ggccaaacgc 660
cagcgccccg gcgagcggct tgacctggct atgctagccg cgattcgccg cgtttacggg 720
ctgcttgcca atacggtgcg gtatctgcag ggcggcgggt cgtggcggga ggattgggga 780
cagctttcgg ggacggccgt gccgccccag ggtgccgagc cccagagcaa cgcgggccca 840
cgaccccata tcggggacac gttatttacc ctgtttcggg ccccgagttt gctggccccc 900
aacggcgacc tgtataacgt gtttgccctg gccttgagc tcttgccaa acgcctccgt 960
cccatgcacg tctttatcct ggattacgac caatgcgccg ccggtgccg ggacgccctg 1020
ctgcaactta cctccgggat ggtccagacc cagtcacca cccaggctc cataccgacg 1080
atctgcgacc tggcgcgcac gtttgcccgg gagatggggg aggctaac 1128

```

<210> 193

<211> 1128

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 193

```

atggcttcgt atccctgcca tcaacacgcg tctgcgttcg accaggctgc gcgttctcgc 60
ggccatagca accgacgtac ggcgttgccg cctcgccggc agcaagaagc cacggaagtc 120
cgctggagc agaaaatgcc cagcgtactg cgggtttata tagacggtcc tcacgggatg 180
gggaaaacca ccaccacgca actgctgggt gccctgggtt cgcgcgacga tatcgtctac 240
gtacccgagc cgatgactta ctggcagggt ctgggggctt ccgagacaat cgcgaacatc 300
tacaccacc aacaccgcct cgaccagggt gagatatcgg ccggggacgc ggcggtggtgta 360
atgacaagcg cccagataaac aatgggcatg ccttatgccg tgaccgacgc cgttctggct 420
cctcatatcg ggggggaggc tgggagctca catgccccgc ccccgccctt caccctcatc 480
ttcgaccgcc atcccatcgc cgccctcctg tgctaccggg ccgcgcgata ccttatgggc 540
agcatgaccc cccaggccgt gctggcggtt gtggccctca tcccgcgcac cttgcccggc 600
acaaacatcg tgttgggggc ccttccggag gacagacaca tcgaccgcct ggccaaacgc 660
cagcgccccg gcgagcggct tgacctggct atgctggccg cgattcgccg cgtttacggg 720
ctgcttgcca atacggtgcg gtatctgcag ggcggcgggt cgtggcggga ggattgggga 780
cagctttcgg ggacggccgt gccgccccag ggtgccgagc cccagagcaa cgcgggccca 840
cgaccccata tcggggacac gttatttacc ctgtttcggg ccccgagttt gctggccccc 900
aacggcgacc tgtataacgt gtttgccctg gccttgagc tcttgccaa acgcctccgt 960
cccatgcacg tctttatcct ggattacgac caatgcgccg ccggtgccg ggacgccctg 1020
ctgcaactta cctccgggat ggtccagacc cagtcacca cccaggctc cataccgacg 1080
atctgcgacc tggcgcgcac gtttgcccgg gagatggggg aggctaac 1128

```

<210> 194

<211> 1128

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 194

```

atggcttcgt acccctgcca tcaacacgcg tctgcgttcg accaggctgc gcgttctcgc 60
ggccatagca accgacgtac ggcgttgccg cctcgccggc agcaagaagc cacggaagtc 120
cgctggagc agaaaatgcc cagcgtactg cgggtttata tagacggtcc tcacgggatg 180
gggaaaacca ccaccacgca actgctgggt gccctgggtt cgcgcgacga tatcgtctac 240
gtacccgagc cgatgactta ctggcagggt ctgggggctt ccgagacaat cgcgaacatc 300
tacaccacac aacaccgcct cgaccagggt gagatatcgg ccggggacgc ggcggtggtgta 360

```

## Sequence Listing.txt

```

atgacaagcg cccagataac aatgggcatg ctttatgccg tgaccgacgc cgttctggct 420
cctcatatcg ggggggagggc tgggagctca catgccccgc ccccgccct caccctcatc 480
ttcgaccgcc atcccatcgc cgccctcctg tgctaccgag ccgcgcgata ctttatgggc 540
agcatgaccc cccaggccgt gctggcggtc gtggccctca tcccgccgac cttggccggc 600
acaaacatcg tgttgggggc ctttccggag gacagacaca tcgaccgcct ggccaaacgc 660
cagcgccccg gcgagcggct tgacctggct atgctggccg cgattcgccg cgtttacggg 720
ctgcttgcca atacggtgcg gtatctgcag ggcggcgggt cgtggcggga ggattgggga 780
cagctttcgg ggacggccgt gccgccccag ggtgccgagc cccagagcaa cgcgggcccc 840
cgacccccata tcggggacac gttatttacc ctgtttcggg ccccgagtt gctggcccc 900
aacggcgacc tgtataacgt gtttgccctg gccttgagc tcttggtcaa acgcctccgt 960
cccatgcacg tctttatcct ggattacgac caatcgcccg ccggtgccg ggacgccctg 1020
ctgcaactta cctccgggat ggtccagacc cacgtcacca cccaggctc cataccgacg 1080
atctgcgacc tggcgcgcac gtttgcccg gagatggggg aggctaac 1128

```

&lt;210&gt; 195

&lt;211&gt; 1128

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence:Artificially synthesized sequence

&lt;400&gt; 195

```

atggcttcgt acccctgcca tcaacacgcg tctgcgttcg accaggctgc gcgttctcgc 60
ggccatagca accgacgtac ggcgttcgc cctcgccggc agcaagaagc cacggaagtc 120
cgcctggagc agaaaatgcc cacgctactg cgggtttata tagacggtcc tcacgggatg 180
gggaaaacca ccaccacgca actgctggtg gccctgggtt cgcgcgacga tatcgtctac 240
gtacccgagc cgatgactta ctggcaggta ctgggggctt ccgagacaat cgcgaacatc 300
tacaccacac aacaccgcct cgaccagggt gagatatcgg ccggggacgc ggcggtggtg 360
atgacaagcg cccagataac aatgggcatg ctttatgccg tgaccgacgc cgttctggct 420
cctcatatcg ggggggagggc tgggagctca catgccccgc ccccgccct caccctcatc 480
ttcgaccgcc atcccatcgc cgccctcctg tgctaccgag ccgcgcgata ctttatgggc 540
agcatgaccc cccaggccgt gctggcggtc gtggccctca tcccgccgac cttggccggc 600
acaaacatcg tgttgggggc ctttccggag gacagacaca tcgaccgcct ggccaaacgc 660
cagcgccccg gcgagcggct tgacctggct atgctggccg cgattcgccg cgtttacggg 720
ctgcttgcca atacggtgcg gtatctgcag ggcggcgggt cgtggcggga ggattgggga 780
cagctttcgg ggacggccgt gccgccccag ggtgccgagc cccagagcaa cgcgggcccc 840
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ctgcaactta cctccgggat ggtccagacc cacgtcacca cccaggctc cataccgacg 1080
atctgcgacc tggcgcgcac gtttgcccg gagatggggg aggctaac 1128

```

&lt;210&gt; 196

&lt;211&gt; 1128

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence:Artificially synthesized sequence

&lt;400&gt; 196

```

atggcttcgt acccctgcca tcaacacgcg tctgcgttcg accaggctgc gcgttctcgc 60
ggccatagca accgacgtac ggcgttcgc cctcgccggc agcaagaagc cacggaagtc 120
cgcctggagc agaaaatgcc cacgctactg cgggtttata tagacggtcc tcacgggatg 180
gggaaaacca ccaccacgca actgctggtg gccctgggtt cgcgcgacga tatcgtctac 240
gtacccgagc cgatgactta ctggcaggta ctgggggctt ccgagacaat cgcgaacatc 300
tacaccacac aacaccgcct cgaccagggt gagatatcgg ccggggacgc ggcggtggtg 360
atgacaagcg cccagataac aatgggcatg ctttatgccg tgaccgacgc cgttctggct 420

```

## Sequence Listing.txt

```

cctcatatcg ggggggaggc tgggagctca catgccccgc ccccgccct caccctcatc 480
ttcgaccgcc atcccatcgc cgccctcctg tgctaccggg ccgcgcgata ctttatgggc 540
agcatgaccc cccaggccgt gctggcggtc gtggccctca tcccgccgac cttgcccggc 600
acaaacatcg tggtggggggc ccttccggag gacagacaca tcgaccgcct ggccaaacgc 660
cagcgccccg gcgagcggtc tgacctggct atgctggccg cgattcgccg cgtttacggg 720
ctgcttgcca atacggtgcg gtatctgcag ggcggcggtt cgtggcgga ggattgggga 780
cagctttcgg ggacggccgt gccgccccag ggtgccgagc cccagagcaa cgcgggcccc 840
cgaccccata tcgggggacac gttatttacc ctgtttcggg ccccgagtt gctggcccc 900
aacggcgacc tgtataacgt gtttgccctg gccttgacg tcttgccaa acgcctccgt 960
cccatgcacg tctttatcct ggattacgac caagcgcccg ccggctgccg ggacgccctg 1020
ctgcaactta cctccgggat ggtccagacc cacgtacca cccaggctc cataccgacg 1080
atctgcgacc tggcgcgac gtttgcccgg gagatggggg aggctaac 1128

```

&lt;210&gt; 197

&lt;211&gt; 1128

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence:Artificially synthesized sequence

&lt;400&gt; 197

```

atggcttcgt acccctgcca tcaacacgcg tctgcgttcg accaggctgc gcgttctcgt 60
ggccatagca accgacgtac ggcgttgccg cctcgccggc agcaagaagc cacggaagtc 120
cgctggagc agaaaatgcc cacgctactg cgggtttata tagacggtcc tcacgggatg 180
gggaaaacca ccaccacgca actgctgggt gccctgggtt cgcgcgacga tatcgtctac 240
gtacccgagc cgatgactta ctggcaggtg ctgggggctt ccgagacaat cgcgaacatc 300
tacaccacac aacaccgcct cgaccagggt gagatatcgg ccggggacgc ggcggtggtg 360
atgacaagcg cccagataac aatgggcatg ccttatgccg tgaccgacgc cgttctggct 420
cctcatatcg ggggggaggc tgggagctca catgccccgc ccccgccct caccctcatc 480
ttcgaccgcc atcccatcgc cgccctcctg tgctaccggg ccgcgcgata ctttatgggc 540
agcatgaccc cccaggccgt gttggcggtc gtggccctca tcccgccgac cttgcccggc 600
acaaacatcg tggtggggggc ccttccggag gacagacaca tcgaccgcct ggccaaacgc 660
cagcgccccg gcgagcggtc tgacctggct atgctggccg cgattcgccg cgtttacggg 720
ctgcttgcca atacggtgcg gtatctgcag ggcggcggtt cgtggcgga ggattgggga 780
cagctttcgg ggacggccgt gccgccccag ggtgccgagc cccagagcaa cgcgggcccc 840
cgaccccata tcgggggacac gttatttacc ctgtttcggg ccccgagtt gctggcccc 900
aacggcgacc tgtataacgt gtttgccctg gccttgacg tcttgccaa acgcctccgt 960
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ctgcaactta cctccgggat ggtccagacc cacgtacca cccaggctc cataccgacg 1080
atctgcgacc tggcgcgac gtttgcccgg gagatggggg aggctaac 1128

```

&lt;210&gt; 198

&lt;211&gt; 1128

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence:Artificially synthesized sequence

&lt;400&gt; 198

```

atggcttcgt acccctgcca tcaacacgcg tctgcgttcg accaggctgc gcgttctcgc 60
ggccatagca accgacgtac ggcgttgccg cctcgccggc agcaagaagc cacggaagtc 120
cgctggagc agaaaatgcc cacgctactg cgggtttata tagacggtcc tcacgggatg 180
gggaaaacca ccaccacgca actgctgggt gccctgggtt cgcgcgacga tatcgtctac 240
gtacccgagc cgatgactta ctggcaggtg ctgggggctt ccgagacaat cgcgaacatc 300
tacaccacac aacaccgcct cgaccagggt gagatatcgg ccggggacgc ggcggtggtg 360
atgacaagcg cccagataac aatgggcatg ccttatgccg tgaccgacgc cgttctggct 420
cctcatatcg ggggggaggc tgggagctca catgccccgc ccccgccct caccctcatc 480

```

## Sequence Listing.txt

```

ttcgaccgcc atcccatcgc cgccctcctg tgctaccgga ccgcgcgata ccttatgggc 540
agcatgaccc cccaggccgt gctggcggtc gtggccctca tcccgccgac cttgcccggc 600
acaaacatcg tgttgggggc ccttccggag gacagacaca tcgaccgcct ggccaaacgc 660
cagcgccccg gcgagcggct tgacctggct atgctggccg cgattcgccg cgtttacggg 720
ctgcttgcca atacggtgcg gtatctgcag ggcggcgggt cgtggcggga ggattgggga 780
cagctttcgg ggacggccgt gccgccccag ggtgccgagc cccagagcaa cgcgggcccc 840
cgaccccaac tcggggacac gttatttacc ctgtttcggg ccccagattt gctggccccc 900
aacggcgacc tgtataacgt gtttgccctg gccttgagcg tcttgcccaa acgcctccgt 960
cccatgcacg tctttatcct ggattacgac caatcgcccg ccggctgccg ggacgccctg 1020
ctgcaactta cctccgggat ggtccagacc cacgtcacca cccagggctc cataccgacg 1080
atctgcgacc tggcgcgcac gtttgcccgg gagatggggg aggctaac 1128

```

&lt;210&gt; 199

&lt;211&gt; 1128

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence:Artificially synthesized sequence

&lt;400&gt; 199

```

atggcttcgt acccctgcca tcaacacgcg tctgcgttcg accaggctgc gcgttctcgc 60
ggccatagca accgacgtac ggcgttgccg cctcgccggc agcaagaagc cacggaagtc 120
cgcttggagc agaaaatgcc cacgctactg cgggtttata tagacggtcc tcacgggatg 180
gggaaaacca ccaccacgca actgctgggt gccctggggt cgcgcgacga tatcgtctac 240
gtacccgagc cgatgactta ctggcgggtg ctgggggctt ccgagacaat cgcgaacatc 300
tacaccacac aacaccgcct cgaccagggt gagatatcgg ccggggacgc ggcggtggtg 360
atgacaagcg cccagataac aatgggcatg ccttatgccg tgaccgacgc cgttctggct 420
cctcatatcg ggggggagcg tgggagctca catgccccgc ccccgccctt cgccctcctc 480
ttcgaccgcg atcccatcgc cgccctcctg tgctaccggg ccgcgcgata ccttatgggc 540
agcatgaccc cccaggccgt gctggcggtc gtggccctca tcccgccgac cttgcccggc 600
acaaacatcg tgttgggggc ccttccggag gacagacaca tcgaccgcct ggccaaacgc 660
cagcgccccg gcgagcggct tgacctggct atgctggccg cgattcgccg cgtttacggg 720
ctgcttgcca atacggtgcg gtatctgcag ggcggcgggt cgtggcggga ggattgggga 780
cagctttcgg ggacggccgt gccgccccag ggtgccgagc cccagagcaa cgcgggcccc 840
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aacggcgacc tgtacaacgt gtttgccctg gccttgagcg tcttgcccaa acgcctccgt 960
cccatgcacg tctttatcct ggattacgac caatcgcccg ccggctgccg ggacgccctg 1020
ctgcaactta cctccgggat gatccagacc cacgtcacca cccagggctc cataccgacg 1080
atctgcgacc tggcgcgcac gtttgcccgg gagatggggg aggctaac 1128

```

&lt;210&gt; 200

&lt;211&gt; 1128

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence:Artificially synthesized sequence

&lt;400&gt; 200

```

atggcttcgt acccggcca tcagcacgcg tctgcgttcg accaggctgc gcgttctcgc 60
ggccatagca accgacgtac ggcgttgccg cctcgccggc agcaagaagc cacggaagtc 120
cgccggagc agaaaatgcc cacgctactg cgggtttata tagacggtcc ccacgggatg 180
gggaaaacca ccaccacgca actgctgggt gccctggggt cgcgcgacga tatcgtctac 240
gtacccgagc cgatgactta ctggcgggtg ctgggggctt ccgagacaat cgcgaacatc 300
tacaccacac aacaccgcct cgaccagggt gagatatcgg ccggggacgc ggcggtggtg 360
atgacaagcg cccagataac aatgggcatg ccttatgccg tgaccgacgc cgttctggct 420
cctcatatcg ggggggagcg tgggagctca catgccccgc ccccgccctt caccctcctc 480
ttcgaccgcc atcccatcgc cgccctcctg tgctaccgga ccgcgcgata ccttatgggc 540

```

# Sequence Listing.txt

```

agcatgaccc cccaggccgt gctggcggtc gtggccctca tcccgccgac cttgcccggc 600
acaaacatcg tgttgggggc ctttccggag gacagacaca tcgaccgcct ggccaaacgc 660
cagcgccccg gcgagcggct tgacctggct atgctggccg cgattcgccg cgtttacggg 720
ctgcttgcca atacggtgcg gtatctgcag ggcggcgggt cgtggcggga ggattgggga 780
cagctttcgg ggacggccgt gccgccccag ggtgccgagc cccagagcaa cgcgggcccc 840
cgacccccaca tcggggacac gttatttacc ctgtttcggg cccccgagtt gctggccccc 900
aacggcgacc tgtataacgt gtttgcctgg gccttgagc tcttgccaa acgcctccgt 960
cccattgcacg tctttatcct ggattacgac caatcgcccg ccggctgccg ggacgccctg 1020
ctgcaactta cctccgggat ggtccagacc cacgtacca cccaggctc cataccgacg 1080
atctgcgacc tggcgcgcac gtttggcccg gagatggggg aggctaac 1128

```

<210> 201

<211> 1128

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 201

```

atggcttcgt accccggcca tcagcacgcg tctgcgttcg accaggctgc gcgttctcgc 60
ggccatagca accgacgtac ggcgttgcgc cctcgccggc agcaagaagc cacggaagtc 120
cgcccggagc agaaaatgcc cacgctactg cgggtttata tagacggtcc ccacgggatg 180
gggaaaacca ccaccacgca actgctgggt gccctgggtt cgcgcgacga tatcgtctac 240
gtacccgagc cgatgactta ctggcgggtg ctgggggctt ccgagacaat cgcgaacatc 300
tacaccacac aacaccgcct cgaccagggt gagatatcgg ccggggacgc ggcggtggta 360
atgacaagcg cccagataac aatgggcatg ccttatgccg tgaccgacgc cgttctggct 420
cctcatatcg ggggggaggg tgggagctca catgccccgc ccccgccctt caccctcatc 480
ttcgaccgcg atcccatcgc cgccctcctg tgctaccggg ccgcgcgata ccttatgggc 540
agcatgacct cccaggccgt gttggcggtc gtggccctca tcccgccgac cttgcccggc 600
acaaacatcg tgttgggggc ctttccggag gacagacaca tcgaccgcct ggccaaacgc 660
cagcgccccg gcgagcggct tgacctggct atgctggccg cgattcgccg cgtttacggg 720
ctgcttgcca atacggtgcg gtatctgcag ggcggcgggt cgtggcggga ggattgggga 780
cagctttcgg ggacggccgt gccgccccag ggtgccgagc cccagagcaa cgcgggcccc 840
cgacccccata tcggggacac gttatttacc ctgtttcggg cccccgagtt gctggccccc 900
aacggcgacc tgtataacgt gtttgcctgg gccttgagc tcttgccaa acgcctccgt 960
cccattgcacg tctttatcct ggattacgac caatcgcccg ccggctgccg ggacgccctg 1020
ctgcaactta cctccgggat ggtccagacc cacgtacca cccaggctc cataccgacg 1080
atctgcgacc tggcgcgcac gtttggcccg gagatggggg aggctaac 1128

```

<210> 202

<211> 1128

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 202

```

atggcttcgt accccggcca tcagcacgcg tctgcgttcg accaggctgc gcgttctcgc 60
ggccatagca accgacgtac ggcgttgcgc cctcgccggc agcaagaagc cacggaagtc 120
cgcccggagc agaaaatgcc cacgctactg cgggtttata tagacggtcc ccacgggatg 180
gggaaaacca ccaccacgca actgctgggt gccctgggtt cgcgcgacga tatcgtctac 240
gtacccgagc cgatgactta ctggcgggtg ctgggggctt ccgagacaat cgcgaacatc 300
tacaccacac aacaccgcct cgaccagggt gagatatcgg ccggggacgc ggcggtggta 360
atgacaagcg cccagataac aatgggcatg ccttatgccg tgaccgacgc cgttctggct 420
cctcatatcg ggggggaggg tgggagctca catgccccgc ccccgccctt caccctcatc 480
ttcgaccgcg atcccatcgc cgccctcctg tgctaccggg ccgcgcgata ccttatgggc 540
agcatgacct cccaggccgt gctggcggtc gtggccctca tcccgccgac cttgcccggc 600

```

## Sequence Listing.txt

```

acaaacatcg tgttgggggc ctttcggag gacagacaca tcgaccgcct ggccaaacgc 660
cagcgccccg gcgagcggct tgacctggct atgctggccg cgattcgccg cgtttacggg 720
ctgcttgcca atacggtgcg gtatctgcag ggcggcgggt cgtggcggga ggattgggga 780
cagctttcgg ggacggccgt gccgccccag ggtgccgagc cccagagcaa cgcgggcccc 840
cgaccccaca tcggggacac gttatttacc ctgtttcggg cccccgagtt gctggccccc 900
aacggcgacc tgtataacgt gtttgccctg gccttgagc tcttgccaa acgcctccgt 960
cccatgcacg tctttatcct ggattacgac caatcgccc cggctgccc ggacgccctg 1020
ctgcaactta cctccgggat ggtccagacc cacgtacca cccaaggctc cataccgacg 1080
atctgcgacc tggcgcgcac gtttgcccgg gagatggggg aggctaac 1128

```

&lt;210&gt; 203

&lt;211&gt; 1128

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence:Artificially synthesized sequence

&lt;400&gt; 203

```

atggcttcgt acccggcca tcagcacgcg tctgcgttcg accaggctgc gcgttctcgc 60
ggccatagca accgacgtac ggcgttgccg cctcgccggc agcaagaagc cacggaagtc 120
cgcccggagc agaaaatgcc cacgctactg cgggtttata tagacggccc ccacgggatg 180
gggaaaacca ccaccacgca actgctgggt gccctgggtt cgcgcgacga tatcgtctac 240
gtacccgagc cgatgactta ctggcgggtg ctgggggctt ccgagacaat cgcgaacatc 300
tacaccacac aacaccgcct cgaccagggt gagatatcgg ccggggacgc ggcggtggtg 360
atgacaagcg cccagataac aatgggcatg ccttatgccg tgaccgacgc cgttctggct 420
cctcataatc ggggggaggg tgggagctca catgccccgc ccccgccct caccctcatc 480
ttcgaccgcc atcccatcgc cgccctcctg tgctaccggc ccgcgcgata ccttatgggc 540
agcatgacct cccaggccgt gctggcgctt gtggccctca tcccgcgac cttgcccggc 600
acaaacatcg tgttgggggc ctttcggag gacagacaca tcgaccgcct ggccaaacgc 660
cagcgccccg gcgagcggct tgacctggct atgctggccg cgattcgccg cgtttacggg 720
ctgcttgcca atacggtgcg gtatctgcag ggcggcgggt cgtggcggga ggattgggga 780
cagctttcgg ggacggccgt gccgccccag ggtgccgagc cccagagcaa cgcgggcccc 840
cgaccccaca tcggggacac gttatttacc ctgtttcggg cccccgagtt gctggccccc 900
aacggcgacc tgtataacgt gtttgccctg gccttgagc tcttgccaa acgcctccgt 960
cccatgcacg tctttatcct ggattacgac caatcgccc cggctgccc ggacgccctg 1020
ctgcaactta cctccgggat ggtccagacc cacgtacca cccaaggctc cataccgacg 1080
atctgcgacc tggcgcgcac gtttgcccgg gagatggggg aggctaac 1128

```

&lt;210&gt; 204

&lt;211&gt; 1128

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence:Artificially synthesized sequence

&lt;400&gt; 204

```

atggcttcgt acccggcca tcagcacgcg tctgcgttcg accaggctgc gcgttctcgc 60
ggccatagca accgacgtac ggcgttgccg cctcgccggc agcaagaagc cacggaagtc 120
cgcccggagc agaaaatgcc cacgctactg cgggtttata tagacggctc ccacgggatg 180
gggaaaacca ccaccacgca actgctgggt gccctgggtt cgcgcgacga tatcgtctac 240
gtacccgagc cgatgactta ctggcgggtg ctgggggctt ccgagacaat cgcgaacatc 300
tacaccacac aacaccgcct cgaccagggt gagatatcgg ccggggacgc ggcggtggtg 360
atgacaagcg cccagataac aatgggcatg ccttatgccg tgaccgacgc cgttctggct 420
cctcataatc ggggggaggg tgggagctca catgccccgc ccccgccct caccctcatc 480
ttcgaccgcc atcccatcgc cgccctcctg tgctaccggc ccgcgcgata ccttatgggc 540
agcatgacct cccaggccgt gctggcgctt gtggccctca tcccgcgac cttgcccggc 600
acaaacatcg tgttgggggc ctttcggag gacagacaca tcgaccgcct ggccaaacgc 660

```

# Sequence Listing.txt

|            |             |            |            |            |            |      |
|------------|-------------|------------|------------|------------|------------|------|
| cagcgccccg | gcgagcggct  | tgacctggct | atgctggccg | cgattcgccg | cgtttacggg | 720  |
| ctgcttgcca | atacgggtgcg | gtatctgcag | gccggcgggt | cgaggcgcca | ggattgggga | 780  |
| cagctttcgg | ggacggccgt  | gccgccccag | ggtgccgagc | cccagagcaa | cgcgggccca | 840  |
| cgacccca   | tcggggacac  | gttatttacc | ctgtttcggg | cccccgagtt | gctggccccc | 900  |
| aacggcgacc | tgtataacgt  | gtttgccttg | gccttgagc  | tcttgccaa  | acgcctccgt | 960  |
| cccatgcag  | tctttatcct  | ggattacgac | caatcgccc  | ccggctgccg | ggacgccctg | 1020 |
| ctgcaactta | cctccgggat  | ggtccagacc | cacgtcacca | ccccaggctc | cataccgacg | 1080 |
| atctgcgacc | tggcgcgcac  | gtttgcccgg | gagatggggg | aggctaac   |            | 1128 |

<210> 205

<211> 1128

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 205

|            |             |            |            |            |             |      |
|------------|-------------|------------|------------|------------|-------------|------|
| atggcttcgt | acccctgcca  | tcaacacgcg | tctgcgttcg | accaggctgc | gcgttctcgc  | 60   |
| ggccatagca | accgacgtac  | ggcgttgccg | cctcgccggc | agcaagaagc | cacggaagtc  | 120  |
| cgcttgagc  | agaaaatgcc  | cacgctactg | cggttttata | tagacggtcc | tcacgggatg  | 180  |
| gggaaaacca | ccaccacgca  | actgctgggt | gccctgggtt | cgcgcgacga | tatcgtctac  | 240  |
| gtacccgagc | cgatgactta  | ctggcaggtg | ctgggggctt | ccgagacaat | cgcgaaacatc | 300  |
| tacaccacac | aacaccgcct  | cgaccagggt | gagatatcgg | ccggggacgc | ggcgggtgta  | 360  |
| atgacaagcg | cccagataac  | aatgggcatg | ccttatgccg | tgaccgacgc | cgttctggct  | 420  |
| cctcatatcg | ggggggaggc  | tgaggactca | catgccccgc | ccccggccct | caccctcatc  | 480  |
| ttcgaccgcc | atcccatcgc  | cgccctcctg | tgctacccgg | ccgcgcgata | ccttatgggc  | 540  |
| agcatgaccc | cccaggccgt  | gctggcggtc | gtggccctca | tcccgccgac | cttgcccggc  | 600  |
| acaaacatcg | tggtgggggc  | ccttcgggag | gacagacaca | tcgaccgcct | ggccaaacgc  | 660  |
| cagcgccccg | gcgagcggct  | tgacctggct | atgctggccg | cgattcgccg | cgtttacggg  | 720  |
| ctgcttgcca | atacgggtgcg | gtatctgcag | gccggcgggt | cgaggcgcca | ggattgggga  | 780  |
| cagctttcgg | ggacggccgt  | gccgccccag | ggtgccgagc | cccagagcaa | cgcgggccca  | 840  |
| cgacccca   | tcggggacac  | gttatttacc | ctgtttcggg | cccccgagtt | gctggccccc  | 900  |
| aacggcgacc | tgtataacgt  | gtttgccttg | gccttgagc  | tcttgccaa  | acgcctccgt  | 960  |
| cccatgcag  | tctttatcct  | ggattacgac | caatcgccc  | ccggctgccg | ggacgccctg  | 1020 |
| ctgcaactta | cctccgggat  | ggtccagacc | cacgtcacca | ccccaggctc | cataccgacg  | 1080 |
| atctgcgacc | tggcgcgcac  | gtttgcccgg | gagatggggg | aggctaac   |             | 1128 |

<210> 206

<211> 1131

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 206

|            |            |            |            |            |             |     |
|------------|------------|------------|------------|------------|-------------|-----|
| atggcttcgt | acccctgcca | tcaacacgcg | tctgcgttcg | accaggctgc | gcgttctcgc  | 60  |
| ggccatagca | accgacgtac | ggcgttgccg | cctcgccggc | agcaagaagc | cacggaagtc  | 120 |
| cgcttgagc  | agaaaatgcc | cacgctactg | cggttttata | tagacggtcc | tcacgggatg  | 180 |
| gggaaaacca | ccaccacgca | actgctgggt | gccctgggtt | cgcgcgacga | tatcgtctac  | 240 |
| gtacccgagc | cgatgactta | ctggcaggtg | ctgggggctt | ccgagacaat | cgcgaaacatc | 300 |
| tacaccacac | aacaccgcct | cgaccagggt | gagatatcgg | ccggggacgc | ggcgggtgta  | 360 |
| atgacaagcg | cccagataac | aatgggcatg | ccttatgccg | tgaccgacgc | cgttctggct  | 420 |
| cctcatatcg | ggggggaggc | tgaggactca | catgccccgc | ccccggccct | caccctcatc  | 480 |
| ttcgaccgcc | atcccatcgc | cgccctcctg | tgctacccgg | ccgcgcgata | ccttatgggc  | 540 |
| agcatgaccc | cccaggccgt | gctggcggtc | gtggccctca | tcccgccgac | cttgcccggc  | 600 |
| acaaacatcg | tggtgggggc | ccttcgggag | gacagacaca | tcgaccgcct | ggccaaacgc  | 660 |
| cagcgccccg | gcgagcggct | tgacctggct | atgctggccg | cgattcgccg | cgtttacggg  | 720 |

## Sequence Listing.txt

```

ctgcttgcca atacggtgcg gtatctgcag ggcggcgggt cgtggcggga ggattgggga 780
cagcttttcg ggacggccgt gccgccccag ggtgccgagc cccagagcaa cgcgggcccc 840
cgaccccata tcggggacac gttatttacc ctgtttcggg ccccgagtt gctggcccc 900
aacggcgacc tgtataacgt gtttgccctg gccttgacg tcttgccaa acgcctccgt 960
cccatgcacg tctttatcct ggattacgac caatcgccc cggctgccg ggacgccctg 1020
ctgcaactta cctccgggat ggtccagacc cacgtcacca cccaggctcc ataccgacga 1080
tctgcgacct ggcgcgcacg tttgcccggg agatggggga ggctaactga a 1131

```

&lt;210&gt; 207

&lt;211&gt; 1131

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence:Artificially synthesized sequence

&lt;400&gt; 207

```

atggcttcgt acccctgcca tcaacacgcg tctgcgttcg accaggctgc gcgttctcgc 60
ggccatagca accgacgtac ggcgttgcg cctcgccggc agcaagaagc cacggaagtc 120
cgcctggagc agaaaatgcc cacgctactg cgggtttata tagacggtcc tcacgggatg 180
gggaaaacca ccaccacgca actgctgggt gccctgggtt cgcgcgacga tatcgtctac 240
gtacccgagc cgatgactta ctggcagggt ctgggggctt ccgagacaat cgcgaacatc 300
tacaccacac aacaccgcct cgaccagggt gagatatcgg ccggggacgc ggcggtggta 360
atgacaagcg cccagataac aatgggcatg ccttatgccg tgaccgacgc cgttctggct 420
cctcatatcg ggggggaggc tgggagctca catgccccgc ccccgccct caccctcatc 480
ttcgaccgcc atcccatcgc cgccctcctg tgctacccgg ccgcgcgata ccttatgggc 540
agcatgaccc ccaggccgtg ctggcgcttc tggccctcat cccgccgacc ttgcccggca 600
caaacatcgt gttgggggccc ctccggagg acagacacat cgaccgcctg gccaaacgcc 660
agcgcgcccg cgagcggtt gacctggcta tgctggccgc gattcgccgc gtttacgggc 720
tgcttgccaa tacggtgcgg tatctgcagg gcggcgggtc gtggcgggag gattggggac 780
agctttcggg gacggccgtg ccgccccagg gtgccgagcc ccagagcaac gcgggccccac 840
gaccccatat cggggacacg ttatttacc tgtttcgggc ccccgagttg ctggccccca 900
acggcgacct gtataacgtg tttgcctggg ccttgacgtt cttggccaaa cgcctccgtc 960
ccatgcacgt ctttatcctg gattacgacc aatcgcccgc cggctgccg gacgccctgc 1020
tgcaacttac ctccgggatg gtccagacc acgtcaccac cccaggctcc ataccgacga 1080
tctgcgacct ggcgcgcacg tttgcccggg agatggggga ggctaactga a 1131

```

&lt;210&gt; 208

&lt;211&gt; 1128

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence:Artificially synthesized sequence

&lt;400&gt; 208

```

atggcttcgt acccctgcca tcaacacgcg tctgcgttcg accaggctgc gcgttctcgc 60
ggccatagca accgacgtac ggcgttgcg cctcgccggc agcaagaagc cacggaagtc 120
cgcctggagc agaaaatgcc cacgctactg cgggtttata taaacggtcc tcacgggatg 180
gggaaaacca ccaccacgca actgctgggt gccctgggtt cgcgcgacga tatcgtctac 240
gtacccgagc cgatgactta ctggcagggt ctgggggctt ccgagacaat cgcgaacatc 300
tacaccacac aacaccgcct cgaccagggt gagatatcgg ccggggacgc ggcggtggta 360
atgacaagcg cccagataac aatgggcatg ccttatgccg tgaccgacgc cgttctggct 420
cctcatatcg ggggggaggc tgggagctca catgccccgc ccccgccct caccctcatc 480
ttcgaccgcc atcccatcgc cgccctcctg tgctacccgg ccgcgcgata ccttatgggc 540
agcatgaccc cccaggccgt gctggcgctt gtggccctca tcccgcgcac cttgcccggc 600
acaaacatcg tgttgggggc cttccggag gacagacaca tcgaccgcct ggccaaacgc 660
cagcgcgccg gcgagcggct tgacctggct atgtggccg cgattcgccg cgtttacggg 720
ctgcttgcca atacggtgcg gtatctgcag ggcggcgggt cgtggcggga ggattgggga 780

```



## Sequence Listing.txt

```

cagcttttcgg ggacggccgt gccgccccag ggtgccgagc cccagagcaa gcggggcccc 840
cgaccccata tcgggggacac gttattttacc ctgtttcggg cccccgagtt gctggccccc 900
aacggcgacc tgtataacgt gtttgccctg gccttgagc tcttgccaa acgcctccgt 960
cccatgcacg tctttatcct ggattacgac caatcgcccg ccggctgccg ggacgccctg 1020
ctgcaactta cctccgggat ggtccagacc cacgtcacca cccaggctc cataccgacg 1080
atctgcgacc tggcgcgcac gtttgcccgg gagatggggg aggctaac 1128

```

&lt;210&gt; 209

&lt;211&gt; 1128

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence:Artificially synthesized sequence

&lt;400&gt; 209

```

atggcttcgt acccctgcca tcaacacgcg tctgcgttcg accaggctgc gcgttctcgc 60
ggccatagca accgacgtac ggcgttgcg cctcgccggc agcaagaagc cacggaagtc 120
cgcttgagc agaaaatgcc cacgctactg cgggtttata tagacggtcc tcacgggatg 180
gggaaaacca ccaacacgca actgctgggt gccctgggtt cgcgcgacga tatcgtctac 240
gtacccgagc cgatgactta ctggcagggt ctgggggctt ccgagacaat cggaacatc 300
tacaccacac aacaccgcct cgaccagggt gagatatcgg ccggggacgc ggcggtggta 360
atgacaagcg cccagataac aatgggcatg ccttatgccg tgaccgacgc cgttctggct 420
cctcatatcg ggggggaggc tgggagctca catgccccgc ccccgccct caccctcatc 480
ttcgaccgcc atcccatcgc cgccctcctg tgctacccgg ccgcgcgata ccttatgggc 540
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acaaacatcg tgttgggggc cttccggag gacagacaca tcgaccgcct ggccaaacgc 660
cagcgccccg gcgagcggct tgacctggct atgctggccg cgattcgccg cgtttacggg 720
ctgcttgcca atacggtgcg gtatctgcag ggcggcgggt cgtggcggga ggattgggga 780
cagctttcgg ggacggccgt gccgccccag ggtgccgagc cccagagcaa cgcgggcccc 840
cgaccccata tcgggggacac gttattttacc ctgtttcggg cccccgagtt gctggccccc 900
aacggcgacc tgtataacgt gtttgccctg gccttgagc tcttgccaa acgcctccgt 960
cccatgcacg tctttatcct ggattacgac caatcgcccg ccggctgccg ggacgccctg 1020
ctgcaactta cctccgggat ggtccagacc cacgtcacca cccaggctc cataccgacg 1080
atctgcgacc tggcgcgcac gtttgcccgg gagatggggg aggctaac 1128

```

&lt;210&gt; 210

&lt;211&gt; 1128

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence:Artificially synthesized sequence

&lt;400&gt; 210

```

atggcttcgt acccctgcca tcaacacgcg tctgcgttcg accaggctgc gcgttctcgc 60
ggccatagca accgacgtac ggcgttgcg cctcgccggc agcaagaagc cacggaagtc 120
cgcttgagc agaaaatgcc cacgctactg cgggtttata tagacggtcc tcacgggatg 180
gggaaaacca ccaccacgca actgctgggt gccctgggtt cgcgcgacga tatcgtctac 240
gtacccgagt cgatgactta ctggcagggt ctgggggctt ccgagacaat cggaacatc 300
tacaccacac aacaccgcct cgaccagggt gagatatcgg ccggggacgc ggcggtggta 360
atgacaagcg cccagataac aatgggcatg ccttatgccg tgaccgacgc cgttctggct 420
cctcatatcg ggggggaggc tgggagctca catgccccgc ccccgccct caccctcatc 480
ttcgaccgcc atcccatcgc cgccctcctg tgctacccgg ccgcgcgata ccttatgggc 540
agcatgaccc cccaggccgt gctggcgctt gtggccctca tcccgccgac cttgcccggc 600
acaaacatcg tgttgggggc cttccggag gacagacaca tcgaccgcct ggccaaacgc 660
cagcgccccg gcgagcggct tgacctggct atgctggccg cgattcgccg cgtttacggg 720
ctgcttgcca atacggtgcg gtatctgcag ggcggcgggt cgtggcggga ggattgggga 780
cagctttcgg ggacggccgt gccgccccag ggtgccgagc cccagagcaa cgcgggcccc 840

```

## Sequence Listing.txt

```

cgaccccata tcggggacac gttattttacc ctgttttcggg ccccgagtt gctggcccc 900
aacggcgacc tgtataacgt gtttgccctg gccttgagc tcttgccaa acgcctccgt 960
cccatgcacg tctttatcct ggattacgac caatcgccc cggctgccg ggacgccctg 1020
ctgcaactta cctccgggat ggtccagacc cacgtcacca cccaggctc cataccgacg 1080
atctgcgacc tggcgcgcac gtttgcccgg gagatggggg aggctaac 1128

```

&lt;210&gt; 211

&lt;211&gt; 1128

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence:Artificially synthesized sequence

&lt;400&gt; 211

```

atggcttcgt acccctgcc tcaacacgcg tctgcgttcg accaggctgc gcgttctcgc 60
ggccatagca accgacgtac ggcgttgccg cctcgccggc agcaagaagc cacggaagtc 120
cgcctggagc agaaaatgcc cacgctactg cgggtttata tagacggtcc tcacgggatg 180
gggaaaacca ccaccacgca actgctgggt gccctggggt cgcgcgacga tatcgtctac 240
gtacccgagc cgatgactta ctggcaggtg ctgggggctt ccgagacaat cgcgaacatc 300
tacaccacac aacaccgcct cgaccagggt gagatatcgg ccggggacgc ggcggtggtg 360
atgacaagcg cccagataac aatgggcatg ccttatgccg tgaccgacgc cgttctggct 420
cctcatatcg ggggggagcg tggagctca catgccccgc ccccgccct caccctcatc 480
ttcgaccgcc atcccatcgc cgccctcctg tgctaccggg ccgcgcgata ccttatgggc 540
agcatgaccc cccaggccgt gctggcgctt gtggccctca tcccgccgac cttgccctgc 600
acaaacatcg tgttgggggc ctttccggag gacagacaca tcgaccgcct ggccaaacgc 660
cagcgccccg gcgagcggct tgacctggct atgctggccg cgattcgccg cgtttacggg 720
ctgcttgcca atacggtgcg gtatctgcag ggcggcgggt cgtggcggga ggattgggga 780
cagctttcgg ggagggccgt gccgccccag ggtgccgagc cccagagcaa cgcgggcccc 840
cgaccccata tcggggacac gttattttacc ctgttttcggg ccccgagtt gctggcccc 900
aacggcgacc tgtataacgt gtttgccctg gccttgagc tcttgccaa acgcctccgt 960
cccatgcacg tctttatcct ggattacgac caatcgccc cggctgccg ggacgccctg 1020
ctgcaactta cctccgggat ggtccagacc cacgtcacca cccaggctc cataccgacg 1080
atctgcgacc tggcgcgcac gtttgcccgg gagatggggg aggctaac 1128

```

&lt;210&gt; 212

&lt;211&gt; 1128

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence:Artificially synthesized sequence

&lt;400&gt; 212

```

atggcttcgt acccctgcc tcaacacgcg tctgcgttcg accaggctgc gcgttctcgc 60
ggccatagca accgacgtac ggcgttgccg cctcgccggc agcaagaagc cacggaagtc 120
cgcctggagc agaaaatgcc cacgctactg cgggtttata tagacggtcc tcacgggatg 180
gggaaaacca ccaccacgca actgctgggt gccctggggt cgcgcgacga tatcgtctac 240
gtacccgagc cgatgactta ctggcaggtg ctgggggctt ccgagacaat cgcgaacatc 300
tacaccacac aacaccgcct cgaccagggt gagatatcgg ccggggacgc ggcggtggtg 360
atgacaagcg cccagataac aatgggcatg ccttatgccg tgaccgacgc cgttctggct 420
cctcatatcg ggggggagcg tggagctca catgccccgc ccccgccct caccctcatc 480
ttcgaccgcc atcccatcgc cgccctcctg tgctaccggg ccgcgcgata ccttatgggc 540
agcatgaccc cccaggccgt gctggcgctt gtggccctca tcccgccgac cttgccctgc 600
acaaacatcg tgttgggggc ctttccggag gacagacaca tcgaccgcct ggccaaacgc 660
cagcgccccg gcgagcggct tgacctggct atgctggccg cgattcgccg cgtttacggg 720
ctgcttgcca atacggtgcg gtatctgcag ggcggcgggt cgtggcggga ggattgggga 780
cagctttcgg ggagggccgt gccgccccag ggtgccgagc cccagagcaa cgcgggcccc 840
cgaccccata tcggggacac gttattttacc ctgttttcggg ccccgagtt gctggcccc 900

```

# Sequence Listing.txt

|            |            |            |            |            |            |      |
|------------|------------|------------|------------|------------|------------|------|
| aacggcgacc | tgtataacgt | gtttgcctgg | gccttggacg | tcttggccaa | acgcctccgt | 960  |
| cccatgcacg | tctttatcct | ggattacgac | caatcgcccg | ccggctgccg | ggacgccctg | 1020 |
| ctgcaactta | cctccgggat | ggtccagacc | cacgtcacca | ccccaggctc | cataccgacg | 1080 |
| atctgcgacc | tggcgcgcac | gtttgcccgg | gagatggggg | aggctaac   |            | 1128 |

<210> 213

<211> 1128

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 213

|            |            |             |             |             |             |      |
|------------|------------|-------------|-------------|-------------|-------------|------|
| atggcttcgt | acccctgcca | tcaacacgcg  | tctgcgttcg  | accaggctgc  | gcgttctcgc  | 60   |
| ggccatagca | accgacgtac | ggcgttgccg  | cctcgccggc  | agcaagaagc  | cacggaagtc  | 120  |
| cgcttgagc  | agaaaatgcc | cacgctactg  | cggttttata  | tagacggtcc  | tcacgggatg  | 180  |
| gggaaaacca | ccaccacgca | actgctgggtg | gccctggggt  | cgcgcgacga  | tatcgtctac  | 240  |
| gtacccgagc | cgatgactta | ctggcaggtg  | ctgggggctt  | ccgagacaat  | cgcgaaacatc | 300  |
| tacaccacac | aacaccgcct | cgaccagggt  | gagatatcgg  | ccggggacgc  | ggcggtggtta | 360  |
| atgacaagcg | cccagataac | aatgggcatg  | ccttatgccg  | tgaccgacgc  | cgttctggct  | 420  |
| cctcatatcg | ggggggaggc | tgggagctca  | catgccccgc  | ccccggccct  | caccctcatc  | 480  |
| ttcgaccgcc | atcccatcgc | cgccctcctg  | tgctaccggg  | ccgcgcgata  | ccttatgggc  | 540  |
| agcatgacct | cccaggccgt | gctggcgctt  | gtggccctca  | tcccgccgac  | cttgcccggc  | 600  |
| acaaacatcg | tgttgggggc | ccttccggag  | gacagacaca  | tcgaccgcct  | ggccaaacgc  | 660  |
| cagcgccccg | gcgagcggct | tgacctggct  | atgctggccg  | cgattcgccg  | cgtttacggg  | 720  |
| ctgcttgcca | atatggtgcg | gtatctgcag  | ggcggcgggt  | cgtaggcggga | ggattggggga | 780  |
| cagctttcgg | ggacggccgt | gccgccccag  | ggtgccgagc  | cccagagcaa  | cgcgggccca  | 840  |
| cgaccccata | tcggggacac | gttattttacc | ctgttttcggg | cccccgagtt  | gctggccccc  | 900  |
| aacggcgacc | tgtataacgt | gtttgcctgg  | gccttggacg  | tcttggccaa  | acgcctccgt  | 960  |
| cccatgcacg | tctttatcct | ggattacgac  | caatcgcccg  | ccggctgccg  | ggacgccctg  | 1020 |
| ctgcaactta | cctccgggat | ggtccagacc  | cacgtcacca  | ccccaggctc  | cataccgacg  | 1080 |
| atctgcgacc | tggcgcgcac | gtttgcccgg  | gagatggggg  | aggctaac    |             | 1128 |

<210> 214

<211> 1128

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 214

|            |            |             |             |             |             |     |
|------------|------------|-------------|-------------|-------------|-------------|-----|
| atggcttcgt | acccctgcca | tcaacacgcg  | tctgcgttcg  | accaggctgc  | gcgttctcgc  | 60  |
| ggccatagca | accgacgtac | ggcgttgccg  | cctcgccggc  | agcaagaagc  | cacggaagtc  | 120 |
| cgcttgagc  | agaaaatgcc | cacgctactg  | cggttttata  | tagacggtcc  | tcacgggatg  | 180 |
| gggaaaacca | ccaccacgca | actgctgggtg | gccctggggt  | cgcgcgacga  | tatcgtctac  | 240 |
| gtacccgagc | cgatgactta | ctggcaggtg  | ctgggggctt  | ccgagacaat  | cgcgaaacatc | 300 |
| tacaccacac | aacaccgcct | cgaccagggt  | gagatatcgg  | ccggggacgc  | ggcggtggtta | 360 |
| atgacaagcg | cccagataac | aatgggcatg  | ccttatgccg  | tgaccgacgc  | cgttctggct  | 420 |
| cctcatatcg | ggggggaggc | tgggagctca  | catgccccgc  | ccccggccct  | caccctcatc  | 480 |
| ttcgaccgcc | atcccatcgc | cgccctcctg  | tgctaccggg  | ccgcgcgata  | ccttatgggc  | 540 |
| agcatgacct | cccaggccgt | gctggcgctt  | gtggccctca  | tcccgccgac  | cttgcccggc  | 600 |
| acaaacatcg | tgttgggggc | ccttccggag  | gacagacaca  | tcgaccgcct  | ggccaaacgc  | 660 |
| cagcgccccg | gcgagcggct | tgacctggct  | atgctggccg  | cgattcgccg  | cgtttacggg  | 720 |
| ctgcttgcca | atatggtgcg | gtatctgcag  | ggcggcgggt  | cgtaggcggga | ggattggggga | 780 |
| cagctttcgg | ggacggccgt | gccgccccag  | ggtgccgagc  | cccagagcaa  | cgcgggccca  | 840 |
| cgaccccata | tcggggacac | gttattttacc | ctgttttcggg | cccccgagtt  | gctggccccc  | 900 |
| aacggcgacc | tgtataacgt | gtttgcctgg  | gccttggacg  | tcttggccaa  | acgcctccgt  | 960 |

## Sequence Listing.txt

|            |            |            |            |            |            |      |
|------------|------------|------------|------------|------------|------------|------|
| cccatgcacg | tctttatcct | ggattacgac | caatcgccc  | ccggctgccg | ggacgccctg | 1020 |
| ctgcaactta | cctccgggat | gggccagacc | cacgtcacca | ccccaggctc | cataccgacg | 1080 |
| atctgcgacc | tggcgcgcac | gtttgcccgg | gagatggggg | aggctaac   |            | 1128 |

&lt;210&gt; 215

&lt;211&gt; 1128

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence:Artificially synthesized sequence

&lt;400&gt; 215

|             |            |             |            |             |             |      |
|-------------|------------|-------------|------------|-------------|-------------|------|
| atggcttcgt  | acccctgcca | tcaacacgcg  | tctgcgttcg | accaggctgc  | gcgttctcgc  | 60   |
| ggccatagca  | accgacgtac | ggcgttgccg  | cctcgccggc | agcaagaagc  | cacggaagtc  | 120  |
| cgccctggagc | agaaaatgcc | cacgctactg  | cgggtttata | tagacggtcc  | tcacgggatg  | 180  |
| gggaaaacca  | ccaccacgca | actgctgggt  | gccctggggt | cgcgcgacga  | tatcgtctac  | 240  |
| gtaccccgagc | cgatgactta | ctggcagggtg | ctgggggctt | ccgagacaat  | cgcgaaacatc | 300  |
| tacaccacac  | aacaccgcct | cgaccagggt  | gagatatcgg | ccggggacgc  | ggcgggtggtg | 360  |
| atgacaagcg  | cccagataac | aatgggcatg  | ccttatgccg | tgaccgacgc  | cgttctggct  | 420  |
| cctcatatcg  | ggggggaggc | tgggagctca  | catgccccgc | ccccggccct  | caccctcatc  | 480  |
| ttcgaccgcc  | atcccatcgc | cgccctcctg  | tgctaccggg | ccgcgcgata  | ccttatgggc  | 540  |
| agcatgacc   | cccaggccgt | gctggcggtc  | gtggccctca | tcccgcgcgac | cttgcccggc  | 600  |
| acaaacatcg  | tggtgggggc | ccttccggag  | gacagacaca | tcgaccgcct  | ggccaaacgc  | 660  |
| cagcgccccg  | gcgagcggct | tgacctggct  | atgctggccg | cgattcgccg  | cgtttacggg  | 720  |
| ctgcttgcca  | atacggtgcg | gtatctgcag  | ggcggcgggt | cgtggcggga  | ggattgggga  | 780  |
| cagctttcgg  | ggacggccgt | gccgccccag  | ggtgccgagc | cccagagcaa  | cgcgggccca  | 840  |
| cgaccccata  | tcggggacac | gttatttacc  | ctgtttcggg | cccccgagtt  | gctggccccc  | 900  |
| aacggcgacc  | tgtataacgt | gtttgcctgg  | gccttgagcg | tcttgcccaa  | acgcctccgt  | 960  |
| cccatgcacg  | tctttatcct | ggattacgac  | caatcgccc  | ccggctaccg  | ggacgccctg  | 1020 |
| ctgcaactta  | cctccgggat | gggccagacc  | cacgtcacca | ccccaggctc  | cataccgacg  | 1080 |
| atctgcgacc  | tggcgcgcac | gtttgcccgg  | gagatggggg | aggctaac    |             | 1128 |

&lt;210&gt; 216

&lt;211&gt; 1128

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence:Artificially synthesized sequence

&lt;400&gt; 216

|             |            |             |            |             |             |      |
|-------------|------------|-------------|------------|-------------|-------------|------|
| atggcttcgt  | acccctgcca | tcaacacgcg  | tctgcgttcg | accaggctgc  | gcgttctcgc  | 60   |
| ggccatagca  | accgacgtac | ggcgttgccg  | cctcgccggc | agcaagaagc  | cacggaagtc  | 120  |
| cgccctggagc | agaaaatgcc | cacgctactg  | cgggtttata | tagacggtcc  | ccacgggatg  | 180  |
| gggaaaacca  | ccaccacgca | actgctgggt  | gccctggggt | cgcgcgacga  | tatcgtctac  | 240  |
| gtaccccgagc | cgatgactta | ctggcagggtg | ctgggggctt | ccgagacaat  | cgcgaaacatc | 300  |
| tacaccacac  | aacaccgcct | cgaccagggt  | gagatatcgg | ccggggacgc  | ggcgggtggtg | 360  |
| atgacaagcg  | cccagataac | aatgggcatg  | ccttatgccg | tgaccgacgc  | cgttctggct  | 420  |
| cctcatatcg  | ggggggaggc | tgggagctca  | catgccccgc | ccccggccct  | caccctcatc  | 480  |
| ttcgaccgcc  | atcccatcgc | cgccctcctg  | tgctaccggg | ccgcgcgata  | ccttatgggc  | 540  |
| agcatgacc   | cccaggccgt | gctggcggtc  | gtggccctca | tcccgcgcgac | cttgcccggc  | 600  |
| acaaacatcg  | tggtgggggc | ccttccggag  | gacagacaca | tcgaccgcct  | ggccaaacgc  | 660  |
| cagcgccccg  | gcgagcggct | tgacctggct  | atgctggccg | cgattcgccg  | cgtttacggg  | 720  |
| ctgcttgcca  | atacggtgcg | gtatctgcag  | ggcggcgggt | cgtggcggga  | ggattgggga  | 780  |
| cagctttcgg  | ggacggccgt | gccgccccag  | ggtgccgagc | cccagagcaa  | cgcgggccca  | 840  |
| cgaccccata  | tcggggacac | gttatttacc  | ctgtttcggg | cccccgagtt  | gctggccccc  | 900  |
| aacggcgacc  | tgtataacgt | gtttgcctgg  | gccttgagcg | tcttgcccaa  | acgcctccgt  | 960  |
| cccatgcacg  | tctttatcct | ggattacgac  | caatcgccc  | ccggctgccg  | ggacgccctg  | 1020 |

Sequence Listing.txt

ctgcaactta cctccgggat ggtccagacc cacgtcacca cccaggctc cataccgacg 1080  
atctgcgacc tggcgcgcac gtttgcccgg gagatggggg aggctaac 1128

<210> 217

<211> 1128

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 217

|             |            |             |            |            |             |      |
|-------------|------------|-------------|------------|------------|-------------|------|
| atggcttcgt  | acccctgcca | tcaacacgcg  | tctgcgttcg | accaggctgc | gcgttctcgc  | 60   |
| ggccatagca  | accgacgtac | ggcgttgccg  | cctcgccggc | agcaagaagc | cacggaagtc  | 120  |
| cgccctggagc | agaaaatgcc | cacgctactg  | cgggtttata | tagacggtcc | tcacgggatg  | 180  |
| gggaaaacca  | ccaccacgca | actgctgggtg | gccctggggt | cgcgcgacga | tatcgtctac  | 240  |
| gtacccgagc  | cgatgactta | ctggcagggtg | ctgggggctt | ccgagacaat | cgcgaaacatc | 300  |
| tacaccacac  | aacaccgcct | cgaccagggt  | gagatatcgg | ccggggacgc | ggcgggtggtg | 360  |
| atgacaagcg  | cccagataac | aatgggcatg  | ccttatgccg | tgaccgacgc | cgttctggct  | 420  |
| cctcatatcg  | ggggggaggc | tgggagctca  | catgccccgc | ccccggccct | caccctcatc  | 480  |
| ttcgaccgcc  | atcccacgcg | cgccctcctg  | tgctacccgg | ccgcgcgata | ccttatgggc  | 540  |
| agcatgacct  | cccaggccgt | gctggcgctt  | gtggccctca | tcccgccgac | cttgcccggc  | 600  |
| acaaacatcg  | tggtgggggc | ccttccggag  | gacagacaca | tcgaccgcct | ggccaaacgc  | 660  |
| cagcgccccg  | gcgagcggct | tgacctggct  | atgctggccg | cgattcgccg | cgtttacggg  | 720  |
| ctgcttgcca  | atacggtgcg | gtatctgcag  | ggcggcgggt | cgtggcgggg | ggattggggg  | 780  |
| cagctttcgg  | ggacggccgt | gccgccccag  | ggtgccgagc | cccagagcaa | cgcgggccca  | 840  |
| cgaccccata  | tcggggacac | gttatttacc  | ctgtttcggg | cccccgagtt | gctggccccc  | 900  |
| aacggcgacc  | tgtataacgt | gtttgcctgg  | gccttgagcg | tcttgcccaa | acgcctccgt  | 960  |
| cccatgcacg  | tctttatcct | ggattacgac  | caatcgcccc | ccggctgccg | ggacgcctctg | 1020 |
| ctgcaactta  | cctccgggat | ggtccagacc  | cacgtcacca | ccccggctc  | cataccgacg  | 1080 |
| atctgcgacc  | tggcgcgcac | gtttgcccgg  | ggagtggggg | aggctaac   |             | 1128 |

<210> 218

<211> 1128

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 218

|            |            |             |            |            |             |      |
|------------|------------|-------------|------------|------------|-------------|------|
| atggcttcgt | acccctgcca | tcaacacgcg  | tctgcgttcg | accaggctgc | gcgttctcgc  | 60   |
| ggccatagca | accgacgtac | ggcgttgccg  | cctcgccggc | agcaagaagc | cacggaagtc  | 120  |
| cgcccgagc  | agaaaatgcc | cacgctactg  | cgggtttata | tagacggtcc | ccacgggatg  | 180  |
| gggaaaacca | ccaccacgca | actgctgggtg | gccctggggt | cgcgcgacga | tatcgtctac  | 240  |
| gtacccgagc | cgatgactta | ctggcgggtg  | ctgggggctt | ccgagacaat | cgcgaaacatc | 300  |
| tacaccacac | aacaccgcct | cgaccagggt  | gagatatcgg | ccggggacgc | ggcgggtggtg | 360  |
| atgacaagcg | cccagataac | aatgggcatg  | ccttatgccg | tgaccgacgc | cgttctggct  | 420  |
| cctcatatcg | ggggggaggc | tgggagctca  | catgccccgc | ccccggccct | caccctcatc  | 480  |
| ttcgaccgcc | atcccacgcg | cgccctcctg  | tgctacccgg | ccgcgcggta | ccttatgggc  | 540  |
| agcatgacct | cccaggccgt | gctggcgctt  | gtggccctca | tcccgccgac | cttgcccggc  | 600  |
| acaaacatcg | tggtgggggc | ccttccggag  | gacagacaca | tcgaccgcct | ggccaaacgc  | 660  |
| cagcgccccg | gtgagcggct | tgacctggct  | atgctggccg | cgattcgccg | cgtttacggg  | 720  |
| ctacttgcca | atacggtgcg | gtatctgcag  | tgcggcgggt | cgtggcgggg | ggattggggg  | 780  |
| cagctttcgg | ggacggccct | gacgccccag  | ggtgccgagc | cccagagcaa | cgcgggccca  | 840  |
| cgaccccata | tcggggaaac | gttatttacc  | ctgtttcggg | cccccgagtt | gctggccccc  | 900  |
| aacggcgacc | tgtacaacgt | gtttgcctgg  | gccttgagcg | tcttgcccaa | acgcctccgt  | 960  |
| cccatgcacg | tctttatcct | ggattacgac  | caatcgcccc | ccggctgccg | ggacgcctctg | 1020 |
| ctgcaactta | cctccgggat | ggtccagacc  | catgtcacca | ccccaggctc | cataccgacg  | 1080 |

## Sequence Listing.txt

atctgcgacc tggcgcgcac gtttgcccgg gagatggggg aggctcac

1128

<210> 219

<211> 1128

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 219

```

atggcttcgt acccctgcc tcaacacgc tctgcgttcg accaggctgc gcgttctcgc 60
ggccatagca accgacgtac ggcgttgccg cctcgccggc agcaagaagc cacggaagtc 120
cgcctggagc agaaaatgcc cacgctactg tgggtttata tagacggtcc tcacgggatg 180
gggaaaacca ccaccacgca actgctgggt gccctgggtt cgcgcgacga tatcgtctac 240
gtacccgagc cgatgactta ctggcagggt ctgggggctt ccgagacaat cgcgaacatc 300
tacaccacac aacaccgcct cgaccagggt gagatatcgg ccggggacgc ggcggtggta 360
atgacaagcg ccagataaac aatgggcatg ccttatgccg tgaccgacgc cgttctggct 420
cctcatatcg ggggggaggc tgggagctca catgccccgc ccccgccct caccctcatc 480
ttcgaccgcc atcccatcgc cgccctcctg tgctacccgg ccgcgcgata ccttatgggc 540
agcatgaccc cccaggccgt gctggcgttc gtggccctca tcccgccgac cttgcccggc 600
acaaacatcg tgttgggggc cttccggag gacagacaca tcgaccgcct ggccaaacgc 660
cagcgccccg gcgagcggct tgacctggct atgctggccg cgattcgccg cgtttacggg 720
ctgcttgcca atacggtgcg gtatctgcag ggcggcgggt cgtggcggga ggattgggga 780
cagctttcgg ggacggccgt gccgccccag ggtgccgagc cccagagcaa cgcgggcccc 840
cgaccccata tcggggacac gttatttacc ctgtttcggg cccccgagtt gctggcccc 900
aacggcgacc tgtataacgt gtttgccctg gccttgagc tcttgccaa acgcctccgt 960
cccatgcacg tctttatcct ggattacgac caatcgcccg ccggtgccg ggacgccctg 1020
ctgcaactta cctccgggat ggtccagacc cagctacca cccaggctc cataccgacg 1080
atctgcgacc tggcgcgcac gtttgcccgg gagatggggg aggctaac 1128

```

<210> 220

<211> 1128

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 220

```

atggcttcgt acccggcca tcaacacgc tctgcgttcg accaggctgc gcgttctcgc 60
ggccatagca accgacgtac ggcgttgccg cctcgccggc agcaagaagc cacggaagtc 120
cgcctggagc agaaaatgcc cacgctactg cgggtttata tagacggtcc tcacgggatg 180
gggaaaacca ccaccacgca actgctgggt gccctgggtt cgcgcgacga tatcgtctac 240
gtacccgagc cgatgactta ctggcgggtg ctgggggctt ccgagacaat cgcgaacatc 300
tacaccacac aacaccgcct cgaccagggt gagatatcgg ccggggacgc ggcggtggta 360
atgacaagcg ccagataaac aatgggcatg ccttatgccg tgaccgacgc cgttctggct 420
cctcatatcg ggggggaggc tgggagctca catgccccgc ccccgccct caccctcatc 480
ttcgaccgcc atcccatcgc cgccctcctg tgctacccgg ccgcgcggta ccttatgggc 540
agcatgaccc cccaggccgt gctggcgttc gtggccctca tcccgccgac cttgcccggc 600
acaaacatcg tgttgggggc cttccggag gacagacaca tcgaccgcct ggccaaacgc 660
cagcgccccg gtgagcggct tgacctggct atgctggccg cgattcgccg cgtttacggg 720
ctacttgcca atacggtgcg gtatctgcag tgcggcgggt cgtggcggga ggattgggga 780
cagctttcgg ggacggccct gacgccccag ggtgccgagc cccagagcaa cgcgggcccc 840
cgaccccata tcggggaaac gttatttacc ctgtttcggg cccccgagtt gctggcccc 900
aacggcgacc tgtacaacgt gtttgccctg gccttgagc tcttgccaa acgcctccgt 960
cccatgcacg tctttatcct ggattacgac caatcgcccg ccggtgccg ggacgccctg 1020
ctgcaactta cctccgggat ggtccagacc catgtacca cccaggctc cataccgacg 1080
atctgcgacc tggcgcgcac gtttgcccgg gagatggggg aggctcac 1128

```

# Sequence Listing.txt

<210> 221  
 <211> 1128  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence:Artificially  
 synthesized sequence

<400> 221  
 atggcttcgt acccctgcc tcaacacgcg tctgcgttcg accaggctgc gcgttctcgc 60  
 ggccatagca accgacgtac ggcgttgccg cctcgccggc aacaagaagc cacggaagtc 120  
 cgcctggagc agaaaatgcc cacgctactg cgggtttata tagacggtcc tcacgggatg 180  
 gggaaaacca ccaccacgca actgctgggt gccctgggtt cgcgcgacga tatcgtctac 240  
 gtacccgagc cgatgactta ctggcagggt ctgggggctt ccgagacaat cgcgaacatc 300  
 tacaccacac aacaccgcct cgaccagggt gagatatcgg ccggggacgc ggcggtggtg 360  
 atgacaagcg cccagataac aatgggcatg ccttatgccg tgaccgacgc cgttctggct 420  
 cctcatatcg ggggggaggc tgggagctca catgccccgc ccccgccct caccctcatc 480  
 ttcgaccgcc atcccatcgc cgccctcctg tgttaccgg ccgcgcgata ccttatgggc 540  
 agcatgaccc cccaggccgt gctggcgctt gtggccctca tcccgccgac cttgcccggc 600  
 acaaacatcg tgttgggggg ccttccggag gacagacaca tcgaccgcct ggccaaacgc 660  
 cagcgccccg gcgagcggct tgacctggct atgctggccg cgattcgccg cgtttacgag 720  
 ctgcttgcca atacggtgcg gtatctgcag ggcggcgggt cgtggcgga ggattgggga 780  
 cagctttcgg ggacggccgt gccgccccag ggtgccgagc cccagagcaa cgcgggcca 840  
 cgaccccata tcggggacac gttatttacc ctgtttcggg cccccgagtt gctggcccc 900  
 aacggcgacc tgtataacgt gtttgccctg gccttgacg tcttgccaa acgcctccgt 960  
 cccatgcacg tctttatcct ggattacgac caatcgccc cggctgccg ggacgccctg 1020  
 ctgcaactta cctccgggat ggtccagacc cacgtcacca cccccggctc cataccgacg 1080  
 atctgcgacc tggcgcgcac gtttgcccgg gagatggggg aggctaac 1128

<210> 222  
 <211> 1128  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence:Artificially  
 synthesized sequence

<400> 222  
 atggcttcgt acccctgcc tcaacacgcg tctgcgttcg accaggctgc gcgttctcgc 60  
 ggccatagca accgacgtac ggcgttgccg cctcgccggc aacaagaagc cacggaagtc 120  
 cgcctggagc agaaaatgcc cacgctactg cgggtttata tagacggtcc tcacgggatg 180  
 gggaaaacca ccaccacgca actgctgggt gccctgggtt cgcgcgacga tatcgtctac 240  
 gtacccgagc cgatgactta ctggcagggt ctgggggctt ccgagacaat cgcgaacatc 300  
 tacaccacac aacaccgcct cgaccagggt gagatatcgg ccggggacgc ggcggtggtg 360  
 atgacaagcg cccagataac aatgggcatg ccttatgccg tgaccgacgc cgttctggct 420  
 cctcatatcg ggggggaggc tgggagctca catgccccgc ccccgccct caccctcatc 480  
 ttcgaccgcc atcccatcgc cgccctcctg tgttaccgg ccgtgcgata ccttatgggc 540  
 agcatgaccc cccaggccgt gctggcgctt gtggccctca tcccgccgac cttgcccggc 600  
 acaaacatcg tgttgggggg ccttccggag gacagacaca tcgaccgcct ggccaaacgc 660  
 cagcgccccg gcgagcggct tgacctggct atgctggccg cgattcgccg cgtttacgag 720  
 ctgcttgcca atacggtgcg gtatctgcag ggcggcgggt cgtggcgga ggattgggga 780  
 cagctttcgg ggacggccgt gccgccccag ggtgccgagc cccagagcaa cgcgggcca 840  
 cgaccccata tcggggacac gttatttacc ctgtttcggg cccccgagtt gctggcccc 900  
 aacggcgacc tgtataacgt gtttgccctg gccttgacg tcttgccaa acgcctccgt 960  
 cccatgcacg tctttatcct ggattacgac caatcgccc cggctgccg ggacgccctg 1020  
 ctgcaactta cctccgggat ggtccagacc cacgtcacca cccccggctc cataccgacg 1080  
 atctgcgacc cggcgcgcac gtttgcccgg gagatggggg aggctaac 1128

# Sequence Listing.txt

<210> 223  
<211> 1128  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Artificially synthesized sequence

```
<400> 223
atggcttcgt acccctgcca tcaacacgcg tctgcgttcg accaggctgc gcgttctcgc 60
ggccatagca accgacgtac ggcgttgcg cctcgccggc aacaagaagc cacggaagtc 120
cgcttgagc agaaaatgcc cacgctactg cgggtttata tagacggtcc tcacgggatg 180
gggaaaacca ccaccacgca actgctggtg gccctgggtt cgcgcgacga tatcgtctac 240
gtacccgagc cgataactta ctggcaggtg ctgggggctt ccgagacaat cgcgaacatc 300
tacaccacac aacaccgcct cgaccagggt gagatatcgg ccggggacgc ggcggtggtg 360
atgacaagcg cccagataac aatgggcatg ccttatgccg tgaccgacgc cgttctggct 420
cctcatatcg ggggggagcg tggagctca catgccccgc cccggccct caccctcatc 480
ttcgaccggc atcccatcgc cgccctcctg tgctaccggc cgcgcgata ccttatgggc 540
agcatgaccc cccaggccgt gctggcgctt gtggccctca tcccgccgac cttgcccggc 600
acaaacatcg tggtgggggc ccttcgggag gacagacaca tcgaccgcct ggccaaacgc 660
cagcgccccg gcgagcggct tgacctggct atgctggccg cgattcgccg cgtttacgag 720
ctgcttgcca atacggtgcg gtatctgcag ggcggcgggt cgtggcggga ggattgggga 780
cagctttcgg ggacggccgt gccgccccag ggtgccgagc cccagagcaa cgcgggcccc 840
cgacccccata tcgggggacac gttatttacc ctgtttcggg cccccgagtt gctggcccc 900
aacggcgacc tgtataacgt gtttgccctg gccttgacg tcttgccaa acgcctccgt 960
cccatgcacg tctttatcct ggattacgac caatcgcccc ccggtgccg ggacgccctg 1020
ctgcaactta cctccgggat ggtccagacc cacgtcacca ccccggtc cataccgacg 1080
atctgcgacc tggcgcgcac gtttgcccgg gagatggggg aggctaac 1128
```

<210> 224  
<211> 1128  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Artificially synthesized sequence

```
<400> 224
atggcttcgt acccggcca tcaacacgcg tctgcgttcg accaggctgc gcgttctcgc 60
ggccatagca accgacgtac ggcgttgcg cctcgccggc agcaagaagc cacggaagtc 120
cgcttgagc agaaaatgcc cacgctactg cgggtttata tagacggtcc tcacgggatg 180
gggaaaacca ccaccacgca actgctggtg gccctgggtt cgcgcgacga tatcgtctac 240
gtacccgagc cgatgactta ctggcgggtg ctgggggctt ccgagacaat cgcgaacatc 300
tacaccacac aacaccgcct cgaccagggt gagatatcgg ccggggacgc ggcggtggtg 360
atgacaagcg cccagataac aatgggcatg ccttatgccg tgaccgacgc cgttctggct 420
cctcatatcg ggggggagcg tggagctca catgccccgc cccggccct caccctcatc 480
ttcgaccggc atcccatcgc cgccctcctg tgctaccggc cgcgcgata ccttatgggc 540
agcatgaccc cccaggccgt gctggcgctt gtggctctca tcccgccgac cttgcccggc 600
acaaacatcg tggtgggggc ccttcgggag gacagacaca tcgaccgcct ggccaaacgc 660
cagcgccccg gtgagcggct tgacctggct atgctggccg cgattcgccg cgtttacggg 720
ctacttgcca atacggtgcg gtatctgcag gtcggcgggt cgtggcggga ggattgggga 780
cagctttcgg ggacggcctt gacgccccag ggtgccgagc cccagagcaa cgcgggcccc 840
cgacccccata tcgggggaaac gttatttacc ctgtttcggg cccccgagtt gctggcccc 900
aacggcgacc tgtacaacgt gtttgccctg gccttgacg tcttgccaa acgcctccgt 960
cccatgcacg tctttatcct ggattacgac caatcgcccc ccggtgccg ggacgccctg 1020
ctgcaactta cctccgggat ggtccagacc catgtcacca cccaggtc cataccgacg 1080
atctgcgacc tggcgcgcac gtttgcccgg gagatggggg aggctaac 1128
```



# Sequence Listing.txt

<210> 225  
<211> 1128  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Artificially synthesized sequence

```
<400> 225
atggcttcgt accccggcca tcaacacgcg tctgcgttcg accaggctgc gcgttctcgc 60
ggccatagca accgacgtac ggcgttgccg cctcgccggc agcaagaagc cacggaagtc 120
cgcttgagc agaaaatgcc cacgctactg cgggtttata tagacggtcc tcacgggatg 180
gggaaaacca ccaccacgca actgctggtg gccctgggtt cgcgcgacga tatcgtctac 240
gtacccaagc cgatgactta ctggcgggtg ctgggggctt ccgagacaat cgcgaacatc 300
tacaccacac aacaccgcct cgaccagggt gagatatcgg ccggggacgc ggcggtggta 360
atgacaagcg cccagataac aatgggcatg ccttatgccc tgaccgacgc cgttctggct 420
cctcatatcg ggggggaggc tgggagctca catgccccgc ccccgccctt caccctcatc 480
ttcgaccgcc atcccatcgc cgccctcctg tgctaccggg ccgcgcgata ccttatgggc 540
agcatgaccc cccaggccgt gctggcgctt gtggtcctca tcccgccgac cttgcccggc 600
acaaacatcg tgttgggggc cttccggag gacagacaca tcgaccgcct ggccaaacgc 660
cagcgccccg gtgagcggct tgacctggct atgctggccg cgattcgccg cgtttacggg 720
ctacttgcca atacggtgcg gtatctgcag tgcggcgggt cgtggcggga ggattgggga 780
cagctttcgg ggacggcctt gacgccccag ggtgccgagc cccagagcaa cgcgggcccc 840
cgaccccata tcggggaaac gttatttacc ctgtttcggg cccccgagtt gctggcccc 900
aacggcgacc tgtacaacgt gtttgccctg gccttgagc tcttgccaa acgcctccgt 960
cccatgcacg tctttatcct ggattacgac caatcgcccc ccggtgccg ggacgccctg 1020
ctgcaactta cctccgggat ggtccagacc catgtcacca cccaggctc cataccgacg 1080
atctgcgacc tggcgcgcac gtttgcccgg gagatggggg aggctaac 1128
```

<210> 226  
<211> 1128  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Artificially synthesized sequence

```
<400> 226
atggcttcgt accccggcca tcaacacgcg tctgcgttcg accaggctgc gcgttctcgc 60
ggccatagca accgacgtac ggcgttgccg cctcgccggc agcaagaagc cacggaagtc 120
cgcttgagc agaaaatgcc cacgctactg cgggtttata tagacggtcc tcacgggatg 180
gggaaaacca ccaccacgca actgctggtg gccctgggtt cgcgcgacga tatcgtctac 240
gtacccaagc cgatgactta ctggcgggtg ctgggggctt ccgagacaat cgcgaacatc 300
tacaccacac aacaccgcct cgaccagggt gagatatcgg ccggggacgc ggcggtggta 360
atgacaagcg cccagataac aatgggcatg ccttatgccc tgaccgacgc cgttctggct 420
cctcatatcg ggggggaggc tgggagctca catgccccgc ccccgccctt caccctcatc 480
ttcgaccgcc atcccatcgc cgccctcctg tgctaccggg ccgcgcgata ccttatgggc 540
agcatgaccc cccaggccgt gctggcgctt gtggtcctca tcccgccgac cttgcccggc 600
acaaacatcg tgttgggggc cttccggag gacagacaca tcgaccgcct ggccaaacgc 660
cagcgccccg gtgagcggct tgacctggct atgctggccg cgattcgccg cgtttacggg 720
ctacttgcca atacggtgcg gtatctgcag tgcggcgggt cgtggcggga ggattgggga 780
cagctttcgg ggacggcctt gacgccccag ggtgccgagc cccagagcaa cgcgggcccc 840
cgaccccata tcggggaaac gttatttacc ctgtttcggg cccccgagtt gctggcccc 900
aacggcgacc tgtacaacgt gtttgccctg gccttgagc tcttgccaa acgcctccgt 960
cccatgcacg tctttatcct ggattacgac caatcgcccc ccggtgccg ggacgccctg 1020
ctgcaactta cctccgggat ggtccagacc catgtcacca cccaggctc cataccgacg 1080
atctgcgacc tggcgcgcac gtttgcccgg gagatggggg aggctaac 1128
```

<210> 227

Sequence Listing.txt

<211> 1128  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 227  
atggcttcgt acccctgcca tcaacacgcg tctgcgttcg accaggctgt gcgttctcgc 60  
ggccatagca accgacgtac ggcgttgccg cctcgccggc aacaagaagc cacggaagtc 120  
cgcccggagc agaaaatgcc cacgctactg cgggtttata tagacggtcc tcacgggatg 180  
gggaaaacca ccaccacgca actgctgggt gccctgggtt cgcgcgacga tatcgtctac 240  
gtacccgagc cgatgactta ctggcgggtg ctgggggctt ccgagacaat cgcgaacatc 300  
tacaccacac aaccccgctt cgaccagggt gagatatcgg ccggggacgc ggcggtggtg 360  
atgacaagcg cccagataac aatgggcatg ccttatgccg tgaccgacgc cgttctggct 420  
cctcatatcg ggggggaggg tgggagctca catgccccgc ccccgccctt caccctcatc 480  
ttcgaccgcc atcccatcgc cgccctcctg tgttaccggg ccgcgcgata ccttatgggc 540  
agcatgacct cccaggccgt gctggcggtt gtggccctca tcccgccgac cttgcccggc 600  
acaaaacatcg tgcttggggc ccttccggag gacagacaca tcgaccgcct ggccaaacgc 660  
cagcgccccg gcgagcggct tgacctggct atgctggctg cgattcgccg cgtttacgag 720  
ctacttgcca atacggtgcg gtatctgcag ggcggcgggt cgtggcgagg ggactgggga 780  
cagctttcgg ggacggcctt gacgccccag ggtgccgagc cccagagcaa cgcgggcccc 840  
cgaccccata tcggggaaac gttatttacc ctgtttcggg cccccgagtt gctggccccc 900  
aacggcgacc tgtacaacgt gtttgccctg gccttgagc tcttgccaa acgcctccgt 960  
ccatgcacg tctttatcct ggattacgac caatcgcccc ccggtgccg ggacgccctg 1020  
ctgcaactta cctccgggat ggtccagacc catgtcacca cccaggctc cataccgacg 1080  
atctgcgacc tggcgcgcac gtttgcccg gagatggggg cggtacac 1128

<210> 228  
<211> 1128  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 228  
atggcttcgt acccctgcca tcaacacgcg tctgcgttcg accaggctgc gcgttctcgc 60  
ggccatagca accgacgtac ggcgttgccg cctcgccggc aacaagaagc cacggaagtc 120  
cgcttgagc agaaaatgcc cacgctactg cgggtttata tagacggtcc tcacgggatg 180  
gggaaaacca ccaccacgca actgctgggt gccctgggtt cgcgcgacga tatcgtctac 240  
gtacccgagc cgatgactta ctggcgggtg ctgggggctt ccgagacaat cgcgaacatc 300  
tacaccacac aacaccgcct cgaccagggt gagatatcgg ccggggacgc ggcggtggtg 360  
atgacaagcg cccagataac aatgggcatg ccttatgccg tgaccgacgc cgttctggct 420  
cctcatatcg ggggggaggg tgggagctca catgccccgc ccccgccctt caccctcatc 480  
ttcgaccgcc atcccatcgc cgccctcctg tgttaccggg ccgcgcgata ccttatgggc 540  
agcatgacct cccaggccgt gctggcggtt gtggccctca tcccgccgac cttgcccggc 600  
acaaaacatcg tgcttggggc ccttccggag gacagacaca tcgaccgcct ggccaaacgc 660  
cagcgccccg gcgagcggct tgacctggct atgctggctg cgattcgccg cgtttacggg 720  
ctacttgcca atacggtgcg gtatctgcag tgcggcgggt cgtggcgagg ggactgggga 780  
cagctttcgg ggacggcctt gacgccccag ggtgccgagc cccagagcaa cgcgggcccc 840  
cgaccccata tcggggaaac gttatttacc ctgtttcggg cccccgagtt gctggccccc 900  
aacggcgacc tgtacaacgt gtttgccctg gccttgagc tcttgccaa acgcctccgt 960  
ccatgcacg tctttatcct ggattacgac caatcgcccc ccggtgccg ggacgccctg 1020  
ctgcaactta cctccgggat ggtccagacc catgtcacca cccaggctc cataccgacg 1080  
atctgcgacc tggcgcgcac gtttgcccg gagatggggg aggtcac 1128

<210> 229  
<211> 1128

Sequence Listing.txt

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 229

```
atggcttcgt accccggcca ttagcacgcg tctgcgttcg accaggctgc gcgttctcgc 60
ggccatagca accgacgtac ggcgttgccg cctcgccggc agcaagaagc cacggaagtc 120
cgcccggagc agaaaatgcc cacgctactg cgggtttata tagacggtcc ccacgggatg 180
gggaaaacca ccaccacgca actgctgggt gccctgggtt cgcgcgacga tatcgtctac 240
gtacccgagc cgatgactta ctggcgggtg ctgggggctt ccgagacaat cgcgaacatc 300
tacaccacac aacaccgcct cgaccagggt gagatatcgg ccggggacgc ggcggtggta 360
atgacaagcg cccagataac aatgggcatg ctttatgccg tgaccgacgc cgttctggct 420
cctcatatcg ggggggaggg tgggagctca catgccccgc ccccgccctt caccctcatc 480
ttcgaccgcc atcccatcgc cgccctcctg tgctaccggg ccgcgcgata ctttatgggc 540
agcatgaccc cccaggccgt gctggcggtt gtggccctca tcccgcggac cttgcccggc 600
acaaacatcg tgttgggggc ctttccggag gacagacaca tcgaccgcct ggccaaacgc 660
cagcgccccg gcgagcggct tgacctggct atgctggccg cgattcgccg cgtttacggg 720
ctgcttgcca atacggtgcg gtatctgcag ggccgggggt cgtggcgggg ggattgggga 780
cagctttcgg ggacggccgt gccgccccag ggtgccgagc cccagagcaa cgcgggcccc 840
cgacccacac tcggggacac gttatttacc ctgtttcggg cccccgagtt gctggccccc 900
aacggcgacc tgtataacgt gtttgccctg gccttgagc tcttgccaa acgcctccgt 960
cccatgcacg tctttatcct ggattacgac caatgcccc cggtctgccg ggacgccctg 1020
ctgcaactta cctccgggat ggtccagacc cagtcacca ccccaggctc cataccgacg 1080
atctgcgacc tggcgcgcac gtttgcccgg gagatggggg aggctaac 1128
```

<210> 230

<211> 1128

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 230

```
atggcttcgt accccggcca tcaacacgcg tctgcgttcg accaggctgc gcgttctcgc 60
ggccatagca accgacgtac ggcgttgccg cctcgccggc agcaagaagc cacggaagtc 120
cacctggagc agaaaatgcc cacgctactg cgggtttata tagacggtcc tcacgggatg 180
gggaaaacca ccaccacgca actgctgggt gccctgggtt cgcgcgacga tatcgtctac 240
gtacccgagc cgatgactta ctggcgggtg ctgggggctt ccgagacaat cgcgaacatc 300
tacaccacac aacaccgcct cgaccagggt gagatatcgg ccggggacgc ggcggtggta 360
atgacaagcg cccagataac aatgggcatg ctttatgccg tgaccgacgc cgttctggct 420
cctcatatcg ggggggaggg tgggagctca catgccccgc ccccgccctt caccctcatc 480
ttcgaccgcc atcccatcgc cgccctcctg tgctaccggg ccgcgcggta ctttatgggc 540
agcatgaccc cccaggccgt gctggcggtt gtggtcctca tcccgcggac cttgcccggc 600
acaaacatcg tgttgggggc ctttccggag gacagacaca tcgaccgcct ggccaaacgc 660
cagcgccccg gtgagcggct tgacctggct atgctggccg cgattcgccg cgtttacggg 720
ctacttgcca atacggtgcg gtatctgcag tgcggcgggt cgtggcgggg ggattgggga 780
cagctttcgg ggacggccct gacgccccag ggtgccgagc cccagagcaa cgcgggcccc 840
cgaccccata tcggggaaac gttatttacc ctgtttcggg cccccgagtt gctggccccc 900
aacggcgacc tgtacaacgt gtttgccctg gccttgagc tcttgccaa acgcctccgt 960
cccatgcacg tctttatcct ggattacgac caatgcccc cggtctgccg ggacgccctg 1020
ctgcaactta cctccgggat ggtccagacc cagtcacca ccccggctc cataccgacg 1080
atctgcgacc tggcgcgcac gtttgcccgg gagatggggg aggctaac 1128
```

<210> 231

<211> 1128

<212> DNA

## Sequence Listing.txt

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence:Artificially synthesized sequence

&lt;400&gt; 231

```

atggcttcgt accccggcca tcaacacgcg tctgcgttcg accaggctgc gcgttctcgc 60
ggccatagca accgacgtac ggcgttgccg cctcgccggc agcaagaagc cacggaagtc 120
cacctggagc agaaaatgcc cacgctactg cgggtttata tagacggtcc tcacgggatg 180
gggaaaacca ccaccacgca actgctgggt gccctgggtt cgcgcgacga tatcgtctac 240
gtacccgagc cgatgactta ctggcgggtg ctgggggctt ccgagacaat cgcgaacatc 300
tacaccacac aacaccgcct cgaccagggt gagatatcgg ccggggacgc ggcggtggtg 360
atgacaagcg ccagataaac aatgggcatg ctttatgccg tgaccgacgc cgttctggct 420
cctcatatcg ggggggaggg tgggagctca catgccccgc ccccgccctt caccctcatc 480
ttcgaccacc atcccatcgc cgccctcctg tgctacccgg ccgcgcggtg ctttatgggc 540
agcatgaccc ccaggccggt gctggcgctt gtggtcctca tcccgcgac cttgcccggc 600
acaaacatcg tgttgggggc cttccggag gacagacaca tcgaccgcct ggccaaacgc 660
cagcgccccg gtgagcggct tgacctggct atgctggccg cgattcgccg cgtttacggg 720
ctacttgcca atacggtgcg gtatctgcag tgcgcgggtt cgtggcgagg cgtttacggg 780
cagctttcgg ggacggcctt gacgccccag ggtgccgagc cccagagcaa cgcgggcccc 840
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aacggcgacc tgtacaacgt gtttgccctg gccttgagc tcttgccaa acgcctccgt 960
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ctgcaactta cctccgggat ggtccagacc cacgtcacca ccccggtc cataccgacg 1080
atctgcgacc tggcgcgcac gtttgcccgg gagatggggg aggctaac 1128

```

&lt;210&gt; 232

&lt;211&gt; 1128

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence:Artificially synthesized sequence

&lt;400&gt; 232

```

atggcttcgt accccggcca tcagcacgcg tctgcgttcg accaggctgc gcgttctcgc 60
ggccatagca accgacgtac ggcgttgccg cctcgccggc agcaagaagc cacggaagtc 120
cgcccggagc agaaaatgcc cacgctactg cgggtttata tagacggtcc ccacgggatg 180
gggaaaacca ccaccacgca actgctgggt gccctgggtt cgcgcgacga tatcgtctac 240
gtacccgagc cgatgactta ctggcgggtg ctgggggctt ccgagacaat cgcgaacatc 300
tacaccacac aacaccgcct cgaccagggt gagatatcgg ccggggacgc ggcggtggtg 360
atgacaagcg ccagataaac aatgggcatg ctttatgccg tgaccgacgc cgttctggct 420
cctcatatcg ggggggaggg tgggagctca catgccccgc ccccgccctt caccctcatc 480
ttcgaccgcc atcccatcgc cgccctcctg tgctacccgg ccgcgcgata ctttatgggc 540
agcatgaccc ccaggccggt gctggcgctt gtggccctca tcccgcgac cttgcccggc 600
acaaacatcg tgttgggggc cttccggag gacagacaca tcgaccgcct ggccaaacgc 660
cagcgccccg gcgagcggct tgacctggct atgctggccg cgattcgccg cgtttacggg 720
ctgcttgcca atacggtgcg gtatctgcag ggcggcggtt cgtggcgagg cgtttacggg 780
cagctttcgg ggacggcctt gccgccccag ggtgccgagc cccagagcaa cgcgggcccc 840
cgaccccata tcggggacac gttatttacc ctgtttcggg cccccgagtt gctggcccc 900
aacggcgacc tgtacaacgt gtttgccctg gccttgagc tcttgccaa acgcctccgt 960
cccatgcacg tctttatcct ggattacgac caatcgccc cggctgccc ggacgcccct 1020
ctgcaactta cctccgggat gatccagacc cacgtcacca cccaggtc cataccgacg 1080
atctgcgacc tggcgcgcac gtttgcccgg gagatggggg aggctaac 1128

```

&lt;210&gt; 233

&lt;211&gt; 1128

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

# Sequence Listing.txt

<220>

<223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 233

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atggcttcgt acccctgcc tcaacacgcg tctgcgttcg accaggctgc gcgttctcgc 60
ggccatagca accgacgtac ggcgttgcg cctcgccggc aacaagaagc cacggaagtc 120
cgcctggagc agaaaatgcc cacgctactg cgggtttata tagacggtcc tcacgggatg 180
gggaaaacca ccaccacgca actgctggtg gccctggggt cgcgcgacga tatcgtctac 240
gtacccgagc cgatgactta ctggcagggt ctgggggctt ccgagacaat cgcgaacatc 300
tacaccacac aacaccgcct cgaccagggt gagatatcgg ccggggacgc ggcggtggtg 360
atgacaagcg cccagataac aatgggcatg cttatgccg tgaccgacgc cgttctggct 420
cctcatatcg ggggggaggc tgggagctca catgccccgc ccccgccctt caccctcatc 480
ttcgaccgcc atcccatcgc cgccctcctg tgttaccggg ccgcgcgata cttatgggc 540
agcatgaccc cccaggccgt gctggcgttc gtggccctca tcccgccgac cttgcccggc 600
acaaacatcg tgttgggggc cttccggag gacagacaca ccgaccgcct ggccaaacgc 660
cagcgccccg gcgagcggct tgacctggct atgctggccg cgattcgccg cgtttacgag 720
ctgcttgcca atacggtgcg gtatctgcag ggcggcgggt cgtggcgga ggattggga 780
cagctttcgg ggacggccgt gccgccccag ggtgccgagc cccagagcaa cgcgggcca 840
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cccatgcacg tctttatcct ggattacgac caatcgcccg ccggtgccg ggacgccctg 1020
ctgcaactta cctccgggat ggtccagacc cacgtacca ccccggtc cataccgacg 1080
atctgcgacc tggcgcgcac gtttgcccg gagatggggg aggctaac 1128
```

<210> 234

<211> 1128

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 234

```
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ggccatagca accgacgtac ggcgttgcg cctcgccggc aacaagaagc cacggaagtc 120
cgcctggagc agaaaatgcc cacgctactg cgggtttata tagacggtcc tcacgggatg 180
gggaaaacca ccaccacgca actgctggtg gccctggggt cgcgcgacga tatcgtctac 240
gtacccgagc cgatgactta ctggcagggt ctgggggctt ccgagacaat cgcgaacatc 300
tacaccacac aacaccgcct cgaccagggt gagatatcgg ccggggacgc ggcggtggtg 360
atgacaagcg cccagataac aatgggcatg cttatgccg tgaccgacgc cgttctggct 420
cctcatatcg ggggggaggc tgggagctca catgccccgc ccccgccctt caccctcatc 480
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agcatgaccc cccaggccgt gctgggtgttc gtggccctca tcccgccgac cttgcccggc 600
acaaacatcg tgttgggggc cttccggag gacagacaca ccgaccgcct ggccaaacgc 660
cagcgccccg gcgagcggct tgacctggct atgctggccg cgattcgccg cgtttacgag 720
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aacggcgacc tgtataacgt gtttgctgg gccttgacg tcttgccaa acgcctccgt 960
cccatgcacg tctttatcct ggattacgac caatcgcccg ccggtgccg ggacgccctg 1020
ctgcaactta cctccgggat ggtccagacc cacgtacca ccccggtc cataccgacg 1080
atctgcgacc tggcgcgcac gtttgcccg gagatggggg aggctaac 1128
```

<210> 235

<211> 1128

<212> DNA

<213> Artificial Sequence

Sequence Listing.txt

<220>

<223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 235

```

atggcttcgt accccggcca tcagcacgcg tctgcgttcg accaggctgc gcgttctcgc 60
ggccatagca accgacgtac ggcgttgcg cctcgccggc agcaagaagc cacggaagtc 120
caccggagc agaaaatgcc cacgctactg cgggtttata tagacggtcc ccacgggatg 180
gggaaaacca ccaccacgca actgctggtg gccctgggtt cgcgcgacga tatcgtctac 240
gtacccgagc cgatgactta ctggcgggtg ctgggggctt ccgagacaat cgcgaacatc 300
tacaccacac aacaccgcct cgaccagggt gagatatcgg ccggggacgc ggcggtggta 360
atgacaagcg cccagataac aatgggcatg ccttatgccg tgaccgacgc cgttctggct 420
cctcatatcg gggggaggc tggagctca catgccccgc ccccgccct caccctcatc 480
ttcgaccgcc atcccatcgc cgccctcctg tgctaccgg ccgcgcgata ccttatgggc 540
agcatgaccc cccaggccgt gctggcgctt gtggccctca tcccgccgac cttgcccggc 600
acaaacatcg tgttgggggc ccttccggag gacagacaca tcgaccgcct ggccaaacgc 660
cagcgccccg gcgagcggct tgacctggct atgctggccg cgattcgccg cgtttacggg 720
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cagctttcgg ggacggccgt gccgccccag ggtgccgagc cccagagcaa cgcgggcccc 840
cgaccccata tcggggagac gttatttacc ctgtttcggg cccccgagtt gctggcccc 900
aacggcgacc tgtacaacgt gtttgctggt gccttgagc tcttgccaa acgcctccgt 960
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ctgcaactta cctccgggat gatccagacc cacgtcacca cccaggctc cataccgacg 1080
atctgcgacc tggcgcgcac gtttgcccgg gagatggggg aggtcac 1128

```

<210> 236

<211> 1128

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 236

```

atggcttcgt accccggcca tcaacacgcg tctgcgttcg accaggctgc gcgttctcgc 60
ggccatagca accgacgtac ggcgttgcg cctcgccggc agcaagaagc cacggaagtc 120
cacctggagc agaaaatgcc cacgctactg cgggtttata tagacggtcc tcacgggatg 180
gggaaaacca ccaccacgca actgctggtg gccctgggtt cgcgcgacga tatcgtctac 240
gtacccgagc cgatgactta ctggcgggtg ctgggggctt ccgagacaat cgcgaacatc 300
tacaccacac aacaccgcct cgaccagggt gagatatcgg ccggggacgc ggcggtggta 360
atgacaagcg cccagataac aatgggcatg ccttatgccg tgaccgacgc cgttctggct 420
cctcatatcg gggggaggc tggagctca catgccccgc ccccgccct caccctcatc 480
ttcgaccgcc atcccatcgc cgccctcctg tgctaccgg ccgcgcggtt ccttatgggc 540
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cagctttcgg ggacggcctt gacgccccag ggtgccgagc cccagagcaa cgcgggcccc 840
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aacggcgacc tgtacaacgt gtttgctggt gccttgagc tcttgccaa acgcctccgt 960
cccatgcacg tctttatcct ggattacgac caatcgcccg ccggtgccg ggacgccctg 1020
ctgcaactta cctccgggat ggtccagacc catgtcacca cccaggctc cataccgacg 1080
atctgcgacc tggcgcgcac gtttgcccgg gagatggggg aggtcac 1128

```

<210> 237

<211> 1128

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 237

```

atggcttcgt accccggcca tcaacacgcg tctgcgttcg accaggctgc gcgttctcgc 60
ggccatagca accgacgtac ggcgttgccg cctcgccggc agcaagaagc cacggaagtc 120
cacctggagc agaaaatgcc cacgctactg cgggtttata tagacggtcc tcacgggatg 180
gggaaaacca ccaccacgca actgctggtg gccctgggtt cgcgcgacga tatcgtctac 240
gtacccgagc cgatgactta ctggcgggtg ctgggggctt ccgagacaat cgcgaacatc 300
tacaccacac aacaccgcct cgaccagggt gagatatcgg ccggggacgc ggcggtggta 360
atgacaagcg cccagataac aatgggcatg ccttatgccg tgaccgacgc cgttctggct 420
cctcatatcg ggggggaggc tgggagctca catgccccgc ccccgccct caccctcatc 480
ttcgaccgcg atcccatcgc cgccctcctg tgctaccggg ccgcgcggtg ccttatgggc 540
agcatgaccc cccaggccgt gctggcgttc gtggtcctca tcccgcgac cttgcccggc 600
acaaacatcg tgttgggggc ccttccggag gacagacaca tcgaccgcct ggccaaacgc 660
cagcgccccg gcgagcggct tgacctggct atgctggccg cgattcgccg ccgttacggg 720
ctacttgcca atacggtgcg gtatctgcag tgcggcgggt cgtggcggga ggattgggga 780
cagctttcgg ggacggccgt gccgccccag ggtgccgagc cccagagcaa cgcgggcccc 840
cgaccccata tcggggacac gttatttacc ctggttcggg cccccgagtt gctggccccc 900
aacggcgacc tgtacaacgt gtttgccctg gccttggacg tcttggccaa acgcctccgt 960
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ctgcaactta cctccgggat gatccagacc cacgtcacca cccaggctc cataccgacg 1080
atctgcgacc tggcgcgcac gtttgcccgg gagatggggg aggctaac 1128

```

<210> 238

<211> 1128

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 238

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atggcttcgt accccggcca tcaacacgcg tctgcgttcg accaggctgc gcgttctcgc 60
ggccatagca accgacgtac ggcgttgccg cctcgccggc agcaagaagc cacggaagtc 120
cacctggagc agaaaatgcc cacgctactg cgggtttata tagacggtcc tcacgggatg 180
gggaaaacca ccaccacgca actgctggtg gccctgggtt cgcgcgacga tatcgtctac 240
gtacccgagc cgatgactta ctggcgggtg ctgggggctt ccgagacaat cgcgaacatc 300
tacaccacac aacaccgcct cgaccagggt gagatatcgg ccggggacgc ggcggtggta 360
atgacaagcg cccagataac aatgggcatg ccttatgccg tgaccgacgc cgttctggct 420
cctcatatcg ggggggaggc tgggagctca catgccccgc ccccgccct caccctcatc 480
ttcgaccgcg atcccatcgc cgccctcctg tgctaccggg ccgcgcggtg ccttatgggc 540
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cagcgccccg gtgagcggct tgacctggct atgctggccg cgattcgccg cgtttacggg 720
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cagctttcgg ggacggccct gacgccccag ggtgccgagc cccagagcaa cgcgggcccc 840
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ctgcaactta cctccgggat ggtccagacc catgtcacca cccaggctc cataccgacg 1080
atctgcgacc tggcgcgcac gtttgcccgg gagatggggg aggctcac 1128

```

<210> 239

<211> 1128

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially synthesized sequence

# Sequence Listing.txt

## synthesized sequence

<400> 239

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ggccatagca accgacgtac ggcgttgccg cctcgccggc agcaagaagc cacggaagtc 120
cgcctggagc agaaaatgcc cagctactg cgggtttata tagacggtcc tcacgggatg 180
gggaaaacca ccaccacgca actgctgggt gccctgggtt cgcgcgacga tatcgtctac 240
gtacccgagc cgatgactta ctggcagggt ctgggggctt ccgagacaat cgcgaacatc 300
tacaccacac aacaccgcct cgaccagggt gagatatcgg ccggggacgc ggcggtggtg 360
atgacaagcg cccagataac aatgggcatg ccttatgccg tgaccgacgc cgttctggct 420
cctcatatcg ggggggaggg tgggagctca catgccccgc ccccgccctt caccctcatc 480
ttcgaccgcc atcccatcgc cgccctcctg tgctaccggg ccgcgcgata ccttatgggc 540
agcatgaccg cccaggccgt gctggcggtc gtggccctca tcccgcggac cttgcccggc 600
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cagcgcgccg gcgagcggct tgacctggct atgctggccg cgattcgccg cgtttacggg 720
ctgcttgcca atacggtgcg gtatctgcag ggcggcgggt cgtggcggga ggattgggga 780
cagctttcgg ggacggccgt gccgccccag ggtgccgagc cccagagcaa cgcgggcccc 840
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aacggcgacc tgtataacgt gtttgccctg gccttgagc tcttgccaa acgcctccgt 960
cccatgcacg tctttatcct ggattacgac caatcgccc cggctgccg ggacgccctg 1020
ctgcaactta cctccgggat ggtccagacc cacgtcacca cccaggctc cataccgacg 1080
atctgcgacc tggcgcgac gtttggcccg gagatggggg aggtcaac 1128
```

<210> 240

<211> 1128

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 240

```
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ggccatagca accgacgtac ggcgttgccg cctcgccggc agcaagaagc cacggaagtc 120
cacctggagc agaaaatgcc cagctactg cgggtttata tagacggtcc tcacgggatg 180
gggaaaacca ccaccacgca actgctgggt gccctgggtt cgcgcgacga tatcgtctac 240
gtacccgagc cgatgactta ctggcgggtg ctgggggctt ccgagacaat cgcgaacatc 300
tacaccacac aacaccgcct cgaccagggt gagatatcgg ccggggacgc ggcggtggtg 360
atgacaagcg cccagataac aatgggcatg ccttatgccg tgaccgacgc cgttctggct 420
cctcatatcg ggggggaggg tgggagctca catgccccgc ccccgccctt caccctcatc 480
ttcgaccgcc atccaatcgc cgccctcctg tgctaccggg ccgcgcggtg ccttatgggc 540
agcatgaccg cccaggccgt gctggcggtc gtgttcctca tcccgcggac cttgcccggc 600
acaaaacatcg tgttgggggc ccttcgggag gacagacaca tcgaccgcct ggccaaacgc 660
cagcgcgccg gtgagcggct tgacctggct atgctggccg cgattcgccg cgtttacggg 720
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cagctttcgg ggacggccct gacgccccag ggtgccgagc cccagagcaa cgcgggcccc 840
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aacggcgacc tgtacaacgt gtttgccctg gccttgagc tcttgccaa acgcctccgt 960
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ctgcaactta cctccgggat ggtccagacc catgtcacca cccaggctc cataccgacg 1080
atctgcgacc tggcgcgac gtttggcccg gagatggggg aggtcac 1128
```

<210> 241

<211> 1128

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially synthesized sequence



# Sequence Listing.txt

<400> 241

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atggcttcgt accccggcca tcaacacgcg tctgcgttcg accaggctgc gcgttctcgc 60
ggccatagca accgacgtac ggcgttgcg cctcgccggc agcaagaagc cacggaagtc 120
cacttggagc agaaaatgcc cagcgtactg cgggtttata tagacggtcc tcacgggatg 180
gggaaaacca ccaccacgca actgctgggt gccctgggtt cgcgcgacga tatcgtctac 240
gtacccgagc cgatgactta ctggcgggtg ctgggggctt ccgagacaat cgcgaacatc 300
tacaccacac aacaccgcct cgaccagggt gagatatcgg ccggggacgc ggcggtggta 360
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cctcatatcg ggggggaggc tgggagctca catgccccgc ccccgccctt caccctcatc 480
ttcgaccgcc atccaatcgc cgccctcctg tgctaccggc ccgcgcggtt ccttatgggc 540
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acaaacatcg tgttgggggc ctttccggag gacagacaca tcgaccacct ggccaaacgc 660
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cagctttcgg ggacggcctt gacgccccag ggtgccgagc cccagagcaa cgcgggcccc 840
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aacggcgacc tgtacaacgt gtttgccctg gccttgagc tcttgccaa acgcctccgt 960
cccatgcacg tctttatcct ggattacgac caatcgcccg ccggctgccg ggacgccctg 1020
ctgcaactta cctccgggat ggtccagacc catgtacca cccaggctc cataccgacg 1080
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<210> 242

<211> 1128

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 242

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cgcttggagc agaaaatgcc cagcgtactg cgggtttata tagacggtcc tcacgggatg 180
gggaaaacca ccaccacgca actgctgggt gccctgggtt cgcgcgacga tatcgtctac 240
gtacccgagc cgatgactta ctggcagggt ctgggggctt ccgagacaat cgcgaacatc 300
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cctcatatcg ggggggaggc tgggagctca catgccccgc ccccgccctt caccctcatc 480
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cagcgccccg gcgagcggct tgacctggct atgctggccg cgattcgccg cgtttacggg 720
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ctgcaactta cctccgggat ggtccagacc cacgtacca cccaggctc cataccgacg 1080
atctgcgacc tggcgcgcac gtttgcccgg gagatggggg aggctaac 1128
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<210> 243

<211> 1128

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially synthesized sequence

# Sequence Listing.txt

<400> 243

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cgcccgagc agaaaatgcc cacgctactg cgggtttata tagacggtcc ccacgggatg 180
gggaaaacca ccaccacgca actgctggtg gccctgggtt cgcgcgacga tatcgtctac 240
gtacccgagc cgatgactta ctggcgggtg ctgggggctt ccgagacaat cgcgaacatc 300
tacaccacac aacaccgcct cgaccagggt gagatatcgg ccggggacgc ggcggtggtg 360
atgacaagcg cccagataac aatgggcatg ctttatgccg tgaccgacgc cgttctggct 420
cctcatatcg ggggggaggg tgggagctca catgccccgc ccccgccct caccctcatc 480
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agcatgaccc cccaggccgt gctggcgctt gtggtcctca tcccgccgac cttgcccggc 600
acaaacatcg tgttgggggc cttccggag gacagacaca tcgaccgcct ggccaaacgc 660
cagcgccccg gtgagcggct tgacctggct atgctggccg cgattcgccg cgtttacggg 720
ctacttgcca atacggtgcg gtatctgcag tgcggcgggt cgtggcggga ggattgggga 780
cagctttcgg ggacggccct gacccccag ggtgccgagc cccagagcaa cgcgggcca 840
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aacggcgacc tgtataacgt gtttgcctgg gccttggacg tcttgccaa acgcctccgt 960
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ctgcaactta cctccgggat ggtccagacc catgtcacca cccaggctc cataccgacg 1080
atctgcgacc tggcgcgcac gtttgcggg gagatggggg aggctcac 1128
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<210> 244

<211> 1128

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 244

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cgcttgagc agaaaatgcc cacgctactg cgggtttata tagacggtcc tcgcgggatg 180
gggaaaacca ccaccacgca actgctggtg gccctgggtt cgcgcgacga tatcgtctac 240
gtacccgagc cgatgactta ctggcagggt ctgggggctt ccgagacaat cgcgaacatc 300
tacaccacac aacaccgcct cgaccagggt gagatatcgg ccggggacgc ggcggtggtg 360
atgacaagcg cccagataac aatgggcatg ctttatgccg tgaccgacgc cgttctggct 420
cctcatatcg ggggggaggg tgggagctca catgccccgc ccccgccct caccctcatc 480
ttcgaccgcc atcccatcgc cgccctcctg tgctaccgg ccgcgcgata ctttatgggc 540
agcatgaccc cccaggccgt gctggcgctt gtggccctca tcccgccgac cttgcccggc 600
acaaacatcg tgttgggggc cttccggag gacagacaca tcgaccgcct ggccaaacgc 660
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cagctttcgg ggacggccgt gccgccccag ggtgccgagc cccagagcaa cgcgggcca 840
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aacggcgacc tgtataacgt gtttgcctgg gccttggacg tcttgccaa acgcctccgt 960
cccatgcacg tctttatcct ggattacgac caatcgccc cggctgccg ggacgccctg 1020
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atctgcgacc tggcgcgcac gtttgcggg gagatggggg aggctaac 1128
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